University, Professor of Physical Chemistry

Heiko Timmers The University of New South Wales, Associate

Rupert William Roye Rutland Visiting Fellow ANU, Emeritus

Roger Cook Swinburne University of Technology, Australia,

tor, Member: Financial Planning Association (Australia)

mechanical engineers; Member, American society of engineerin ducation; Member, Australian association of engineering educat

eremy Mould Swinburne University, Professor of Astrophys

Reza Hashemi-Nezhad University of Sydney, Australia, Professor

mes East Western Sydney University, Senior lecturer in pure

Narjes Gorjizadeh SMaRT Centre at UNSW Australia, Visiting

Pablo Moscato The University of Newcastle, Australia, Professor

Martina Stenzel UNSW Sydney, Australia, Scientia Professor and

chael R. Gillings Macquarie University, Professor of Molecula

Padgham RMIT, Melbourne, Australia, Professor of Artificial

oplied Mathematics, Memer, Australian Institute For Aboriginal and

Prabhakar Ranganathan Monash University, Senior Lecturer in

esearcher of Astrophysics, Carnegie-Princeton-IAS Fellow

Briony Towers Centre for Risk and Community Safety, RMI7

David Adams The Australian National University, Research Fellow in

Research Fellow, International Astronomical Union

Suelei Hu University of Queensland, Researcher

Behailu Kibret Monash University, Research Fello

Aleš Neubert University of Queensland, PostDoc in computer science

Nicholas V Apollo University of Melbourne, Postdoctoral Researcher

Paul Michael Geil The University of Melbourne, Postdoctoral

Farshid Pahlevani SMaRT Centre at UNSW Australia, Senior

ndrea Sardinha Taschetto University of New South Wales, Sydne

if Mansoor University of Western Australia, Post Doctor

niara Tonini University of Melbourne, Astrophysics Research

Abel-John Buchner Monash University, Postdoctoral Researcher in

Stefan Rümmele UNSW Sydney, Research Associa

Amir hossein rouhi RMIT. Phd in IT

lan A Newan University of Tasmanina, Research Assignment

Ron Haines UNSW, Australia, Lecturer in Chemistry

Researcher, School of Electrical & Computer Engineerin

Philip Dart The University of Melbourne, Lecturer, Software

Alexander William Bray Australian National University, Physics Ph

Alexander Hadjiivanov University of New South Wales, AI grad

Daniel King formerly Monash University, Geotechnical Engineering

Fiona Helen Panther Australian National University, PhD candidate

MI Kon Belic University of Technology Sydney, PhD Candidate

oel Ricky Steele University of Technology Sydney, Medical Science

ory Gough University of Technology Sydney, Molecular Biology

Australian National University, Complex Systems Ph.D. Student

Verena Winiwarter Alpen-Adria_Universität Klagenfurt, Institute of

Social Ecology, Member of the Austrian Academy of Sciences, Full

Christoph Lampert IST Austria, Professor of Computer Science

Ana Sokolova University of Salzburg, Associate Professor of

Karin Baur University of Graz, Professor Mathematics

Manfried Faber Techn. Univ. Wien, Professor of Nuclear Physics

Horst Cerjak Graz University of Technology Austria, Professor em.

Lars Keller University of Innsbruck, Asst. Professor of Geography

Gabriele Haug-Moritz Karl-Franzens-University Graz, Austria

ssor of Modern History, Member, Academia Europaea

Volker Ribitsch University Graz, Austria, Professor of Physical

oor Aßheuer University of Salzburg, Senior Lecturer

Robert Pucher University of Applied Sciences Technikum Wien,

Klemens Fellner University of Graz, Professor of Mathematics

Markus Walzi Innsbruck University, Professor of Economics

Trent Houliston University of Newcastle Australia, Software

German Environmental Award

Professor of Environmental History

Molecular Genetics

Nils Carqueville University of Vienna

Professor of Business Informatics

Grad Student, Member, Australian Society for Parasitology

Yonhon Ng, Engineering grad student

vironmental Science grad student, ARCCSS memb

Sophie C. Chen ANU, Mathematics PhD candidate

Muhammad Hanif, PhD (Image Processing)

Fluid Mechanics and Turbulence, Fulbright Fellow

vid Day Flinders University, Professor of Biological

ohn Smith University of NSW, Professor of Physics

Member ACM, Senior Member IEEE, Professor

echanical and Aerospace Engineering

'ladimir Estivill-Castro Griffith University, Professor, Se

Damon Honnery Monash University, Australia, Professor

Jniversity Tahar Moulay, Saida, Algeria, Professor of Structural

<mark>ıan Tokatlian</mark> Universidad Torquato Di Tella, Argentina, Professor o

John Page UNSW, Senior Lecturer Ramana Kumar Data61 at CSIRO, and UNSW, Computer Science llow, American Heart Association ohn Boland University of South Australia, Professor of Yuan-Sen Ting The Australian National University, Postdoctor Mariela Soto-Berelov RMIT, Post Doctoral Research And Engineering, Australian National University, Emeritus Professor of Physics, Member of the Order of Australia, Fellow of the Australian Stephen McCormick University of New England (Australia) & KTH - Royal Institute of Technology (Sweden), Research Fellow in Theoretical Cosmology, Member, Astronomical Society of Australia Joshua Lacey University of Melbourne, Post-doctoral research fellow Dr Ryan Holmes University of New South Wales, Research Associate Ezael Bello. Systems Engineer , American Mathematical Society; Fellow, Australian Dliver A.H. Jones RMIT University, Associate Professor of Analytical Chemistry, Fellow of the Royal Australian Chemical ir of Computer Science, ACM Fellow, IEEE Fellow, Fellow Jack Desbiolles University of South Australia, Senior Research ow of Australian Academy of Science, Humboldt Award

ichael Archer AM, FAA, DistFRSN, FRZS, FACE, FWAA ofessor of Biological, Earth & Environmental Sciences, Member der of Australia, Fellow Australian Academy of Science, fellow, Member, International Astronomical Union; Member of Science, and Global, Urban, and Social Studies ck Evertsz RMIT University, Research Fello iences, Senior Lecturer in Mathematics za Hoseinnezhad RMIT University, Associate Professor of ephen Carey Federation University Australia, Lecturer in Geology

udio Cazorla The University of New South Wales Australia, essor of Computing and II, Newcastle Robotics Lab. **(urt Lambeck** The Australian National University, FAA, FRS, NAS omputational Science, Senior Member, Association for Computing orey J.A. Bradshaw Flinders University, Professor of Globa logy, Fellow, Royal Society of South Australia ydia Jane Kavanagh The University of Queensland, Director of rst Year Engineering, Associate Professor rvoje I kalcic The Australian National University, Associate Professor, Head of Seismology and Mathematical Geophysics Klaus Weber Australian National University, Associate Professor of Graeme Smith The University of Queensland, Australia, Associate

Wolfgang Feist University of Innsbruck, Professor of Physics, Magdalena Ortiz TU Wien, Austria, Assistant Professor of Computer

Physics, Fellow of the American Physical Society Michael Angelo Curtotti Australian National University, Honorary

Steve Smith University of Veterinary Medicine, Vienna, Head of Michael Schrefl Johannes Kepler University of Linz, Austria, Ian Macreadie RMIT University, Professor of Biotechnology Richard Edwards UNSW Sydney, Senior Lecturer in Bioinformatics, Member of the Royal Society of Biology Daniel Angus The University of Oueensland, Senior Lecturer in Gregory Mark Yaxley The Australian National University, Professor

Markus Walzl Innsbruck University, Professor of Economics Jan-Christoph Otto University of Salzburg, Assistant Professor of Nicholas Geard University of Melbourne, Senior Lecturer, Computer Infomation Systems, Member, Leibniz Society ny N. Burkitt The University of Melbourne, Australia, Professor Materials Science Silke Werth University of Graz, Assistant Professor of Biology omedical Engineering and Chair of Bio-Signals and Bio-Systems eter John Gawthrop University of Melbourne, Professorial Fellow Hing-Ho Tsang Swinburne University of Technology, Australia. Senior Lecturer in Structural Engineering Christoph Kirsch University of Salzburg, Austria, Professor of Alan Lymbery Murdoch University, Professor of Biology stralia, Lecturer in Molecular Ecology, Killam Postdoctoral Fellow

Dr. Robert Schabetsberger University of Salzburg, Lecturer in :mma Ryan-Weber Swinburne University of Technology, Australia, Associate Professor in Astrophysics Rosalyn Shute Flinders University, Austtralia, Adjunct Professor of Greg Murray Swinburne University of Technology, Professor of Head Department of Computer Science, Peter Weish Univ. Bodenkultur, Vienna., Lecturer in Ecology and Mariana Salles Pereira da Costa, Mechanical Engineering PhD candidate with the University of Newcastle Holger Baumgardt University of Queensland, Professor of Physics Peter E Strazdins The Australian National University, Associate

Bea Bleile University of New England, Armidale. NSW, Australia, n Martin Fernandez Institute for Mathematics and Scientific Johannes Postler University of Innsbruck, PostDoc aniel Smertnig University of Graz, Postdoc in Mathemati Sabrina Marozin University of Salzburg, Senior Fellow Inai-Fehér Two Minute Papers, Researcher ina Preuer, Bioinformatics Grad Student Associate Professor of psychology, Fellow, Australian Psychological Martin Heusel JKU Linz, Austria, Machine Learning PhD studen Anita Erharter, Biology PhD student abriella Fenkart Department of Molecular Biology, Biology grad pert Okorn Graz University of Technology, Chemistry grad studen Katja Kalkschmied University of Graz, Political and Empirical **Sazem Abhary** University of South Australia, Professor, Mechanical Economics Ph.D. student and Manufacturing Engineering, Member, American society of

Professor of Neurobiology

is Van Der Jeugt Ghent University, Belgium, Professor of

Henri Eisendrath Vrije Universiteit Brussel, Professor of Phys

mad Heydari Beni KU Leuven, PhD Candidate in Computer

Steven Puttemans KU Leuven, PhD Researcher in Computer Vision

ander Meuris VIB-UGent Center for Medical Biotechnolog

nie Kourula, Postdoc Medial Sciences

Fons Lemmens Petrochemistry, Maintenance electrician

Sibylle Driezen Vrije Universiteit Brussel, Physics grad studer

Jose Artur Quilici-Gonzalez Federal University of ABC, Bra

aw and Negotiations, Nobel Peace Institute Fellow and Vice Chair of

Francisco Di Biase Neto Universidade Geraldo Di Biase, Brazil,

lelly de Camargo Emeritus prof. School of Communications, Univ

EE RAS, IEEE SA, IEEE South Brazil RAS Chapter Chair,

amille Yehia Universidade Federal de Minas Gerais, Professo

dre Carlos Ponce de Leon Ferreira de Carvalho Universidade

l<mark>ineu de Andrade Lopes</mark> University of São Paulo, Professor o

MaLL/UFSCar, Associate Professor of Machine Learning

Murilo A. Romero University of Sao Paulo, Professor of

Germano Tremiliosi-Filho University of Sao Paulo, Brazil, Full

ulo Alberto Nussenzveig Physics Institute, University of Sac

Carlos Eugenio Imbassahy Carneiro Universidade de São Paulo, Rui Zheng Markable, AI Engineer

Professor of Chemistry Director of Chemistry Institute

te, Master degree in Bioinformatics

ellow, Royal Society of Canada

CAIAC. Professor of Computer Science

Alan Mackworth University of British Columbia, Professor of

Computer Science, Fellow, Royal Society of Canada, Ass>n for the

Ashfague Hussain Bokhari King Fahd University of Petroleum &

r of International Center for Theoretical Physics

& Computer Engineering, Fellow, Canadian Academy of Engineers;

Jonathan Bagger Johns Hopkins University, Professor of Physics,

Thian Yew Gan Department of Civil & Environmental Engineering,

Fellow, Institute of Electrical & Electronics Engineers

British Columbia, Professor of Mathematics and Economics

Mark Crowley University of Waterloo, Assistant Professor

Peter Reiner University of British Columbia, Professor of

Peter Kenneth MacKinnon University of Ottawa, Research

arshall Beier McMaster University, Professor of Political Science

Randolph George Goebel University of Alberta, Professor,

Nicola Santoro Carleton University, Distinguished Researc

Nuclear Winter while teaching at uColorado- Boulder

Fellow, AAAS & American Physical Society

nysics and Astronomy

Computing Science

Professor of Computer Science

-arid N. Najm University of Toronto, Canada, Professor of Electrical

Minerals, Professor of Mathematics, Recipient of Salam Prize;

rina Fischer-Kowalski University of Vienna, Professor of Social Fellow of the Royal Society of Canada

of Computer Science, Reimagine Education Award (Wharton

Sheila Mcllraith University of Toronto, AAAI Fellow, member ACM,

Christian Stary Johannes Kepler University, Professor of Business
University of Alberta, Edmonton, Alberta, Canada, Professor of Water

Member IEEE Computational Intelligence Society

an Christian Albiez SENAI CIMATEC, Senior Researcher

mology of São Paulo, Assistant Professor

Maximiliam Luppe USP, Professor

Lucas Venezian Povoa Federal Institute for Education, Science, a

candre da Silva Simões UNESP Brazil Professor of Robotic

ssor of Physics, Junior Member, Brazilian Academy of Sciences

Grand PhD, Professor of Post-Graduation

e Sao Paulo, Professor of Computer Science

oland Gueubel CTMA - UCL, B-LiFE Director

doctoral Researcher in Theoretical Physics

gor Vieira KU Leuven, PhD Student,

emistry and Biotechnology, Director of VIB-UGent Center for

Director, Theoretical Physics Institute Eric Rivard University of Alberta, Department of Chemistry, Professor ls O. Petersen University of Alberta, Professor Emeritus of Monica Gorassini University of Alberta, Professor of oseph H. Thywissen University of Toronto, Professor of Physics, Adolf Buse University of Alberta Edmonton Canada, Emeritus Michael Serpe University of Alberta, Associate Professor of L Wayman University of Alberta, Professor Emeritus of International Politics, PhD in International Politics Pierre Leprince GIGA-Neuroscience, University of Liège, Belgium, Pierre Dupont Louvain University, Belgium, Professor of Computer omputational Linguistics, ACL Fellow, EurAl Fellow Yaroslav Filinchuk UCL, Belgium, Professor of Chemistr om De Medts Ghent University (Belgium), Professor in

i-Yan Yuan University of Alberta, Canada, Professor of Computer aerveldt University of Alberta, Associate Professor of Robert E. Campbell University of Alberta, Professor of Chemistry Alex Brown University of Alberta, Professor of Chemistry James Patrick Delgrande Simon Fraser University, Professor of Founding Director, Tiputini Biodiversity Station nica Dahl Simon Fraser University, B.C., Canada, Professor of omputing Sciences (Emeritus), Calouste Gulbenkian Award for Sci Karl Dilcher Dalhousie University, Halifax, Canada, Professor of Christopher W. Cairo University of Alberta, Associate Professor of Josh Taylor University of Toronto, Assistant Professor of Electrical Amar Vutha University of Toronto, Professor of Physics Amanda W. Peet University of Toronto, Professor of Physics ectrical and Computer Engineering, Fellow IEEE elmy Sherif University of Alberta, Canada, Professor Emritus of .uca Scardovi University of Toronto, Assistant Professor of Electrical Bardakjian University of Toronto, Professor of Biomedical chard B. Steim, Professor of Biology rry Unsworth University of Alberta, Associate Professor of Carpenko University of Alberta, Professor of Mathematics Dr. Wvtze Brouwer University of Alberta, Professor Emeritus,

Walter Whiteley York University, Toronto, Canada, Professor of

Kevin Leyton-Brown UBC, Professor of Computer Science, Artificial

Alexandre Coutant, Professor of Communication

atistical Sciences and Theoretical Physics Institute

World renown leader in Algebraic Geometry

James D. Lewis University of Alberta, Professor of Mathematics

ransportation, Member, IEEE society

uter Science and Engineering, Associate Professor

Nikolaj Berntsen GenieBelt, CTO and co-founder, Ph.d. in Physics

us Johansson Refind Technologies, Machine learning

Morten Bormann Nielsen Aarhus University, Post doc in Materials

erhanu Addis Ababa University, Ethiopia, Associate Professor

hrem Teshale Bekele Addis Ababa University, Ethiopia, Assistant

Claus Beier Uni. of Copenhagen, Professor of Ecosystems and

Gundersen, Professor of Forest Ecologoy

Le Jeannic NBI, Physics PhD

Stefan Groote University of Tartu, Estonia, Senior Scientist ames L. Pinfold (FRSC) University of Alberta and Visting Professor King's College London, Professor of Physics eng Liu University of Alberta, Professor of Chemical Engineering Adele Buckley Canadian Pugwash, Physicist, engineer, environmental argaret-Ann Armour University of Alberta, Associate Dean of ancer Clinic Edmonton Ab ,Canada Homain Laroche Microsoft, Research Scientist David J. Lockwood National Research Council Canada, Researcher Anna Diana Jordan University of Alberta, Physical Chemistry Tadele Libay Aligaz, Lecturer of Mechanical Engineering Professor of Electromagnetics Maharaj Montreal Institute for Learning Algorithms, Al grad Lowe McGill University, Machine learning grad student ent Michalski Universite de Montreal, Computer Science grad thieu Roy, B.Eng. (engineering physics) me Lavigne McGill Clinical and Health Informatics, chette, Supervisor, administration andar Rachkov University of Toronto, Astrophysics PhD Paradise University of Toronto, Astronomy grad student Fang Xi Lin Canadian Institute of Theoretical Astrophysics, PhD arren Cree Carleton University, Physics grad student

Viktor Toth Aalto University, Neuroscience grad student PhD. Chemistry, Prize of the Cuban Academy of Science Fundación Ciencia & Vida., PhD Student laude Cohen-Tannoudji 1997 Physics Nobel Laureate, Professor of

Ling Chen, Biology post-doctoral fellow

rge F Smoot Paris, University of California at Berke ofessor of Physics, Director, 2006 Nobel Laureate in Physic Siegen, Senior Research Fellow Annick Suzon-Weiner University Paris-Sud, Professor of Chemic Physics, Fellow, American Physical Society Joxe Alain EHESS, Ligue des Droits de l'Homme, France, U rofessor(R) of War & Peace Sociology _oïc Merel IMJ-PRG, University Paris-Diderot, Professor of sabeth Cramer Borde University of Versailles-St Quentin, Kevin Guelton Université de Reims Champagne-Ardenne, Associate Quan Shi The University of Queensland, Civil Engineering PhD Cremilleux University of Caen, Professor of Computer Science oardo PROVENZI Université Paris Descartes, Associate Profess ematical Physics SIAM awarded lephy Nauifo Engelbert LIMOS CNRS University Clermon **louri** University of Caen, France, Associate Professor of

mar Träbert Ruhr-Universität Bochum, Germany, Professor of n-Paul Delahaye Université de Lille1, Professor of Compu ncent Padois Université Pierre et Marie Curie, Paris 6, Associate Frederic Piat Université du Mans, France, Associate Professo: njamin Stamm RWTH Aachen University, Professor of Bruno Zanuttini University of Caen, France, Assistant Professor of Ubbo Felderhof RWTH Aachen University, Emeritus Professor of Bernd Havo University of Marburg, Professor of Macroeconomics Pascal J. Bordé Univ. Bordeaux, France, Professor of Astrophysics as Schrimpf Philipps-Universität Marburg, Germany, Professor History of Astronomy and Observational Astronomy Prof. Dr. Claude Portenier Philips-Universität-Marburg, Professor of Danko Nikolic CSC, FIAS, Professor of Cognitive Science Antoine Chaillet CentraleSupelec - Univ. Paris Saclay - IUF, Professor edical Laser Therapy, M.Sc. in Computer Science philosophy, chair of the dept Jamal Atif Université Paris-Dauphine, PSL Research University, IRS, Professor of Computer Sciences (Artificial Intelligence rice Popineau CentraleSupelec, Computer Science Professor es; North-Rhine Westfalen Academy of Sciences and Arts mas Gasenzer Universität Heidelberg, Germany, Professor of c Sanchis University of Toulouse Capitole (IUT Rodez), Fran Volker Lohweg in IT-Institute Insdustrial IT, OWL University of

ied Sciences Professor for Diskrete Systems

mpiu Stamatescu Inst. Theor. Physics, Univ. Heidelberg,

Harald Weinfurter University of Munich, Professor of Physics

di Schmitz RWTH Aachen University. Professor of Physics

<mark>jios Gounalakis</mark>, University of Marburg, Professor of Lav

edrich Tomi University of Heidelberg, Professor of Mathematics

Michael Müller Chairman of Friends of Nature GERMANY, Deputy

Gia Dvali Ludwig Maximilians University, Max Planck Institute for

Marc Halbrügge Berlin Institute of Technology, Computer Science

Detlef Weigel Max Planck Institute for Developmental Biology,

Walter A. Wohlgemuth University Medical Center Regensburg,

Oliver M. Hohn German Aerospace Center (DLR), Postdoctoral

Daniel Romero Mujalli University of Potsdam, Biologist (PhD

Wieland Brendel University Tübingen, Postdoctoral Researcher

Carlos Acevedo Pardo HafenCity University Hamburg, Research

Knut Heidemann University of Goettingen, Physics postdoc

Giulia Deolmi RWTH Aachen, Postdoctoral Fellow

Manuel Angst Research Centre Juelich, Physicist

Georg Holtz Wuppertal Institut, Research Fellow

Lindauer University of Freiburg, Postdoc Research Fellow

mann Institute for Mathematical Stochastics (IMS), Georg

David Meinel riedrich-Alexander University of Erlangen Nuremberg, Science, Bangalore, Professor of Physics, FRS; Fellow, APS; Fellow,

t University of Göttingen, Postdoc Mathematical Biology

Stefan Jakobs RWTH Aachen University, Doctoral Researcher in

Stephen Kockentiedt, Computer Science PhD Student

Razvan Peter Nemes, Tech Researcher

Tommaso Soru University of Leipzig, AI grad student

Germany, Professor of Medicine, Memeber of the European Board of

Colin William Lewis LSE, PhD candidate in Behavioral Sciences and

onso Marco Valle Max Planck Institute for Intelligent Systems,

Director, Member, National Academy of Sciences; Foreign Member,

te Bohg Max Planck Institute for Intelligent Systems, Senior

Jochen Kerdels University of Hagen, Postdoctoral Researcher in

Physics and New York University, Professor of Physics

Wilfried Musterle, Dr. rer. nat. (Chemistry)

Minister for Environment a. D.

Interventional Radiology

id Lunney CSNSM/IN2P3-Universite de Paris Sud, CNRS Senion Fredrik Allenmark Ludwig Maximilian University of Munich,

Satya Majumdar LPTMS, CNRS, Universite Paris-Sud Orsay, France,

Associate HafenCity University Hamburg, PhD Candidate Tecnical

Mattia Walschaers Laboratoire Kastler Brossel - Université Pierre et

Yazgan Tuna Max-Planck-Institute for the Science of Light, PhD in

Heidmann CNRS, Laboratoire Kastler Brossel, Director of Ivan Stepanov RWTH Aachen, PhD in Physics

Dominique Lalanne CNRS France, Director of Research CNRS,

Udo Friess Institute of Environmental Physics, University of

ico Jean_Claude Dijon University, Professor of Physics Vargas Halabí Universidad de Costa Rica, Associated Daniel Chateigner Normandie Université, Professor of Physics rge Franchoo CNRS - IN2P3 - IPN, Nuclear physics research ola Vega Castillo Instituto Tecnologico de Costa Rica, Professor of hristophe Soulé CNRS and IHES Mathematician Electrical Engineering (CIPA) School of Chemistry, CostanRican, Professor, Costa Rica riane Baladi CNRS and UPMC, Paris, Directeur de Recherches, educ Michèle Ecole Normale Supérieure, Paris, France, Researcher ndrés Almansa CNRS, Université Paris Descartes, Senior Research

an Burdun AIXTREE S.A.S., Président & Directeur Scientifique

Michele Sebag CNRS, France, Senior researcher in Computer

rah Labelle Université Paris13, Maître de conférences

elix Treguer ISCC-CNRS, Socio-legal researcher

asiliki Barzoka, Formulation RD scientist

Researcher in Deep Learning

James O' Donoghue Dublin City University, Postdoctoral

line PLAUD Blaise Pascal University, Big Data PhD student

Adrian Revault d'Allonnes Université Paris 8 - LIASD, Lecturer in

tificial Intelligence, President of the French chapter of the IEEE

as Burger CNRS - CEA - Grenoble-Alpes University -

Yves Dessaux CNRS - Centre national de la recherche scientifique

ognitives, Ecole Normale Supérieure, PSL Research University,

Mehdi Khamassi Institute of Intelligent Systems and Robotics,

Harry Bernas CNRS-University Paris Saclay, France, Research

Felix Werner CNRS and Ecole Normale Superieure, Researcher in

Université Pierre et Marie Curie, Paris, France, CNRS Permanent

Thomas Schatz LSCP (ENS/EHESS/CNRS), Département d>Etudes

Behavioral Economics

(France), Research advisor CNRS - Deputy director Dept. de

microbiologie - I2BC, Former EMBO and NSF fellow

David Guennec, PhD of Computer Science

aris, France, Postdoctoral Researcher

Pierre-Yves Oudeyer Inria, France, Research director

Perino Luc UCBL1, PhD, Medicine

ilico TU Wien, Postdoc in fundamental physics

mer council member International Peace Bureau

Karine Causse Dassault Systèmes, Software Engineering Phd - HT

Ben Cramer Grip institute, Brussels, Researcher ecological security,

lien Corman, Computer Scientist

ric Henry Pinnington University of Alberta, Professor Emeritus of David R. Bundle University of Alberta, Professor of Chemistry, Colin L Soskolne University of Alberta; University of Canberra, Professor emeritus of Epidemiology, Fellow, American College of

Amelie Montero Esteva Facultad de Comunicación, Universidad de Joanne Clavel Museum national d'Histoire naturelle, Paris,

ngineers, Research Ambassador of German Academic Exchange Ivar Ekeland, FRSC Universite Paris-Dauphine and University of Derek A L Paul Pugwash Conferences on Science and World Affairs, Jiri Zlatuska Masaryk University, Professor of Informatics, Rector dovic Van Waerbeke University of British Columbia, Professor of Tomas Halik Charles University, Prague, Professor of Sociology, 2014 Research Director, CNRS mpleton Prize Laureate; member of European academy of Science Jan Feyereisl GoodAI, AI Roadmap Institute, Senior Research Scientist, Executive Director Associate & retired Professor of Engineering, One of the creators of Jan Tamáš, Ph.D. President of the Humanist Party in Czechia, IT

Rajiv Boddeda Dr, Postdoc in Quantum Optics consultant, Former spokesperson of the No-to-Bases Initiative Michael Bowling University of Alberta, Professor of Computer Adrien Maillard Charles University (Prague), Research fellow nna Vernerova Charles University, Prague, Czech Republic, IT grad

James J. Buchanan University of Wisconsin-Madison, Physics grad ane Lguensat IMT Atlantique, PhD student in Information Benjamin Clement INRIA, PhD Student Soufian Salim Université de Nantes, Computer science PhD candidate Czjzek Mirjam CNRS, Protein crystallographer ancois Hoh CNRS, france, Doctor in biochenistr ie Tailleur University of Bordeaux-ICMCB, PhD student in Aaen Aalborg University, Denmark, Associate Professor in <mark>ora Giovagnoli</mark>, Nuclear Physics PhD studer

or of Physics, Fellow, American Physical Society

artin Reiss University of Marburg, Germany, Research Fellow

Computer Science and Digital Media

and Arts, Professor of Computer Science

nathematics, -informatics and Physics

Arne Fellien, Professor of Artificial Intelligence

National Academy of U. States

Emeritus of Computer Science

Guenther Goerz Univ. of Erlangen-Nuremberg, Professor of

Artificial Intelligence, European Association for Artificial

Nikos K. Logothetis Director in the Max Planck Institute for

beckx Jacques University of Saarbrücken (Germany), Professor

aurenz Wiskott Institut für Neuroinformatik Ruhr-Universität

chum Germany ELL Professor of Theory of Neural Systems

atcheslav Mukhanov LMU, Munich, Germany, Professor of

Mathematics and Dean of the Faculty of Mathematics and Computer

C- Max Planck Institute for Biophysical Chemistry / Goettingen

artin Jung Develop Group / FAU Erlangen, Head of Software

er W. M. Rauhut Ludwig-Maximilians-University, Curator,

Manami Sasaki University of Erlangen-Nuremberg, Professor of

a Dziggel RWTH Aachen University, Heisenberg Fellow in

Jirich Katz University of Erlangen-Nürnberg, Germany, Professor of

eurobiology and Behavior, Berlin Brandenburg Academy of Sciences

skofier, Professor of Computer Science

ichael Tielemann Univ. of Erlangen-Nuremberg, Professor of

nard Buchalla Ludwig-Maximilians-Universitaet (LMU) Munich,

ngineering Consulting (and University Teacher)

ct Professor of Earth Sciences

BIological Cybernetics, Tubingen, Germany, Professor of

K University of Hamburg, Pugwash Germany,

Rodrigo ENS, College de France, PhD student Quantum Gaisser RWTH Aachen, PhD student in physics Reckling RWTH Aachen University, PhD student in Physi Benedikt Sanftl Friedrich-Alexander University of Erlanger If Hofmann KIT, Staff Researcher

abian Rennecke Heidelberg University, Physics Postdoc eas Fleischmann Heidelberg University, Germany, Senio Venegas-Rojas Technische Universität Hamburg, Germany, o Bettoni Intitut fur theoretische physik Heidelberg University ysics postdoctoral fellow ristoph Mayr FAU Erlangen-Nuremberg, Germany, Senior anouil Angelakis Max-Planck-Institut für Radioastronomie, n, DE, Staff researcher of radio astrophysics homas Chaigne Charité Universitätsmedizin Berlin, Postdoctoral fellow (Bioimaging) Sebastian Kapfer FAU Erlangen, Scientist an David Smeddinck University of Bremen, Research Associate ian Kriesch Friedrich Alexander University Erlangen-Nuremberg, Nydin Demircioglu Uniklinikum Essen, Germany, Machine Learning

Islan Temirov Forschungszentrum Jülich, Germany, Research group

Pfeifer Friedrich-Alexander Universität Erlangen-Nürnberg,

mas Eberl Erlangen Centre for Astroparticle Physics, University

r. Kalyan Prasad Sinhamahapatra IIT Kharagpur, Professo

nasekaran Karuppanan Anna university, Associate Professor

aharlal Nehru University, New Delhi, India

Bombay, Powai, Mumbai 400076 INDIA, Professor of Physics

ahati, Guwahati, India-781039, Assocaite Professor of C

ab Bhattacharyya Indian Institute of Science, Professor o

a, Institute Professor, Institute Chair Professor and Professor of

Srinivas Kota Birla Institute of Technology and Science, Pilani, India,

Shankar Prawesh IIT Kanpur, Professor of Information Systems

ofessor in Ocean Engineering

nieh Patel Department of Electronic Science

P Arun Indian institute of science, Associate Professor of

ssistant Professor, EEE Department, BITS Pilani, India

Aashish Mathur Birla Institute of Technology & Science Pilani, In

nagan Electrical engineering department, IIT Madras.

p Kumar Mishra Siksha (O) Anusandhan University, Associate

et Agarwal Indian Institute of Technology Delhi, Assistant

Srinivas V Veeravalli Indian Institute of Technology Delhi, Professor,

Engineering, Member, Institute of Engineers India

mol M. Marathe Assistant Professor, Assistant Professor of

Rakhee Birla Institutie of Technology and Science, Pilani INDIA

gan Banerjee Indian Institute of Technology Bombay, Professor

kesh Choubisa BITS, Pilani (India), Associate Professor of

d Alpershtein Braude College Carmiel Israel, Professor of

Dan Ritter Technion, Israel, Professor of Electrical Engineering

eppe Lonetto Weizmann Institute of Science, PhD

ubir Biswas Weizmann Institute of Science, Post-doc in Physics

Member of the Society of Petroleum Engineers (SPE), Engineer

Franziska Paul Weizmann Institute of Science, Postdoc in Systems

naud Courvoisier Weizmann Institute of Science, Physics PhD

of the Pugwash Council (1997-2002)

go Calvanese Free University of Bozen-Bolzano, Professor

Luca Simoncini University of Pisa, Italy, Professor Emeritus of

aria Luisa Chiofalo University of Pisa Professor of Ph

Luigi Portinale, Professor of Computer Science

Professor of Robotics, former Minster of Education, Italy

ichele Papa University of Campania-Luigi Vanvitelli - Napl

affaella Bernardi University of Trento, Professor of Computational

Monica Zoppè Institute of Clinical Physiology CNR of Italy, Biology

Falcone CNR, Director of the Institute of Cognitive Sci

Saverio Alberti CESI-MeT University of Chieti, Italy, Lab Head

Marco Montali Free University of Bozen-Bolzano, Italy, Senior

rgio Chiarelli INFN Italy Research Director

and Technologies, National Research Council of ITALY

Cancer Pathology, UICC permanent fellow

bberto Zamparelli Università di Trento, Professor of Linguistics

anluca Antonelli University of Cassino, Italy, Professor of

vi Karp ORT Braude College, Karmiel, Israel, Professor of

South Campus, New Delhi, Assitant Professor

r of Electrical Engineering

Award by VIFRA International Foundation

Department of Applied Mechanics

Associate Professor of MAthematics

Cherian Thomas, Mechatronics engineer

Rajib Goswami Tezpur University, Systems Analys

lanikandan H Birla Institute of Technology and Science, Seni

esearch Fellow, Associate Member Institution of Engineers Inc

Professor of Physics

r.C.Bharatiraja SRM UNIVERSITY, Chennai, India, Professor in

Supratim Hay Indian Institute of Science, Assistant Professor of

Rupam Kataki Tezpur University, Assam, India, Professor of

vanath Layek BITS - PIlani, Pilani Campus, Assistant Profess

Suresh Govindarajan IIT Madras, Professor of Physic

Enakshi Bhattacharya IIT Madras, Professor of Electrical

Computer Science

Assistant Professor, Design

Shiva Shankar Chennai Mathematical Institute, Professor (of Applied

adeep Sarin IIT Bombay, India, Professor of Physics

rti Rajaraman, Professor Emeritus of Theoretical

of Aerospace Engineering, Fellow of Institue of Engineers, Chai

Ieidelberg, Anthropologist, freelance elson Daniel de Aguiar Lima Universität Heidelberg, Postdoc in **Nover** NaturwissenschaftlerInnen Initiative e.V., Dr.rer.na nacy, Chemistry, Biotechnology), German Chemical Society Antonia Barke Marburg University, Germany, Postdoctoral thy Jay Herbst, Astronomer mas Schramm HafenCity University Hamburg, Professor of s Schneider University of Bremen, Germany, Professor of **latthias Kubisch** Humboldt-Universität zu Berlin, Robotics elberg Academy of Sciences and Humanities; Fellow, Institute of ctrical and Electronics Engineers, Association for the Advancement Tim Althoff Stanford University, Computer Science PhD student Felix Huber University of Siegen, Physics grad student swald Berthold Humboldt-Universität zu Berlin, Robotics PhD Richard Möhn Kagoshima University, AI safety research studen Friedmann Eppelein, Research Associate Neuroscience, Member of Leopoldina, Germany, Foreign Member of

hik Panja IISc Bangalore, Physics grad student hankhar, Computer Science Grad Student tyajeet Vishwakarma, Computer Science Student Daryan Kempe AG Biophysics, RWTH Aachen, PhD student Swapan Jain Self, Prospective graduate student Hirendrasinhji Rana Indo Nordic Strategic Association, India (NPO/ Think Tank), Founder & Managing Director, Consulting Adviser tthias Hein Saarland University, Professor of Mathematics and Santiago Casas Institut fuer Theoretische Physik, Universitaet elberg, Germany, Physics PhD Student Patrick Foldenauer Heidelberg University, Physics grad student TLj - Spiritual and Technology Trainer, Digital Leader in IT space ti Doneria IIT kanpur, Student Sujith Kumar IISc, Bangalore, India, Biology Undergrad nik Dasgupta Indian Institute of Science, Undergrad in Materia Astroparticle Physics, Physics PhD student mas Gal University of Erlangen-Nuremberg, PhD Student of a Viermann, Physics PhD student Johannes Irag Friedrich-Alexander-University Erlangen-Nürnberg sabeth Bosch, Molecular Medicine PhD student Daniel Bhatti FAU Erlangen-Nürnberg, Physics PhD student Daniel Hoffmann Philipps-Universität Marburg, Biology PhD student ian Klos Heidelberg University. Physics graduate studen **OV** Universität Leipzig, Computer Science PhD student Nürnberg, Chemistry PhD student Tobias S. Zech FAU Erlangen-Nürnberg, Phd student in physics Thomas Fauster Friedrich-Alexander-Universität Erlangen-Nürnberg, Milan Schirowski, Chemistry PhD student

Mathias Diehl, PhD Student

Martin Klein German Aerospace Center, PhD Candidat

cha Leonhardt, Physics grad student

ofessor of Computer Science, General Secretary, Hellenic Artificial

e Giannakopoulos NCSR «Demokritos» and SciFY PNPC,

ias Sakellariou Dept. of Applied Informatics, University of

Constantinos Biekas University of Ioannina, Associate Professor

ieter Zeh University of Heidelberg, Prof. em. of Physics Daniel L. Kovacs Budapest University of Technology and Economics at Department of Computing and Mathematics

for Intelligent Machines, Professor of Computer Science

'ngvi Bjornsson Reykjavik University, Professor of Computer

Indian Academy of Sciences; Fellow, Indian National Science

Bengaluru, Professor, APS Fellow

Rama Govindarajan International Centre for Theoretical Sciences,

enkatesh IIT Madras, Professor of Practice, Department of HSS,,

Matthias Bucher Technical University of Crete, Associate Professor

nputer Science Engineering

crobiology, Fellow of the American Academy of Microbiology M. Don MacElroy University College Dublin, Ireland, Professor igi Palmieri University of Freiburg, Germany, Computer Science Orr Trinity College Dublin, Adjunct Associate Professor o T Sheridan University College Dublin, Professor of Option ngineering, Fellow Optical Society of America, Fellow SPII olan Leib RWTH Aachen University, Germany, Physics lichael Zaworotko University of Limerick, Professor of Chemical Sciences, Fellow, Royal Society of Chemistry oseph O'Mahony Waterford Institute of Technology, Academ searcher Marie Curie Fellow Kristina Hostakova Ruhr-Universität Bochum, German d Chew Trinity College Dublin, Associate Professor of Geolog efan Sint Trinity College Dublin, Associate Professor of Theoretical nysics, German Physical Society bastian Wetzel Heidelberg University, Physics PhD Stude Cormac McGuinness Trinity College Dublin, College Green, Caroline Zygar LMU Munich, Psychology grad student Moritz Schöne University of Heidelberg, Physics grad studer Persoons Trinity College Dublin, Assistant Professor i er Blau Trinity College Dublin, Professor of Physics of ed Materials, NANOSMAT prize, MRIA, FTC rard Cagney University College Dublin, Lecturer, SFI Investigator Jagdish K. Vij University of Dublin, Trinity College Dublin, Ireland, Honorary Professor of Electronic Materials Wim Meijer University College Dublin, Professor of Microbiology James G. Lunney Trinity College Dublin, Professor in Physics William Dick Trinity College Dublin, Adjunct Professor, School o m Fernando Trinity College Dublin, Lecturer Nigel H. Buttimore Trinity College Dublin, the University of Dublin, Emeritus Fellow in Mathematic dizabeth Shotton University College Dublin, Lecturer, Architecture Magdalena Eriksson University of Cape Coast, Professor of Medical

Sarah McCormack Trinity College Dublin, Associate Professor in nergy Engineering, ERC Grant Awardee Michael Peardon Trinity College Dublin, Associate Professor of

Researcher, Materials Science ssio Ghionzoli Scuola Superiore Sant>Anna, Researche Elisabetta Visalberghi Istituto di Scienze e Tecnologie della ognizione, Consiglio Nazionale delle Ricerche, Italy, Doctor in andro Maini INAF-IRA Bologna, Astrophysics PhD studen Mattioni, Programmer, Computer Enginee a Seravalli IMEM-CNR Research Institute, Italy, Researcher in al Holland University College Dublin, Assistant Professor, Giovanna Trevisi IMEM-CNR Institute, Italy, Researcher in Physics esca Casoli Consiglio Nazionale delle Ricerche, Italy, Physicist Stefan Hutzler Trinity College Dublin, Ireland, Associate Professor in Academy, Ireland's academy of sciences and humanities James McDermott University College Dublin, Assistant Professor in iversity College Dublin, Associate Professor talian National Research Council (ISTC-CNR), Researcher ames Heffron National University of Ireland, Cork, Professor of Biochemistry, Member of the Royal Irish Academy John Cassidy Professor of Chemistry Dublin Institute of Technology President Elect of the Institute of Chemistry of Ireland, Matsumae Michael Bridge TCD, Professor of Chemistry, MRSC, FIC **Ke Casey** University College Dublin, Associate Professor of Sean Cawley Software Engineering Ltd, Retired Professor, FIC Advanced Studies, Dublin 4, Ireland., Senior Professor Timothy J. Foster Trinity College Dublin, Professor of Molecular Microbiology, Member of the Royal Irish Academy nis Dowling University College Dublin, Professor

idan Coffey Cork Institute of Technology, Professor of Biology

omas Brian Hamilton McMurry, Retired Professor of Organic

zgur Bayram Maynooth University, Lecturer, CDA Award

hemistry, Fellow Emeritus trinity College Dublin; Member

Tatiana Perova Fellow Emeritus, Physicist, School of Engineering,

athilde Raverdeau Trinity College Dublin, Researcher in

nity College Dublin, The University of Dublin, Fellow of Trinity

nan Emmett Duffy Trinity College Dublin, Research Associate

onata Dubber Trinity College Dublin, Ireland, Research Fellow in

James Parkes MD Inter-Euro Technology Ltd, PhD MRSC FICI

Anne Marie Mahon Galway-, Mayo Institute of Technology,

Abdulrahman Alqadami Maynooth University Ireland, Researcher,

el Fremling Maynooth University, Physics postdoc

David Lynch University College Dublin, AI Grad Student

College Cork, Ireland, Computer Science grad student

c Nguyen, PhD student in Bioinfomatics

nar H. Gudmundsson University of Iceland, Professor Emeritus of Ireland, Head Study of Religions Department

ttina Stefanini Maynooth University, Dr in Palaeoecology

Dean Hurley PhD, Chemistry Postgraduate Student, Associate

ember of the Royal Society of Chemistry (AMRSC)

Cóilín Minto Galway-Mayo Institute of Technology, Senior Researcher

Katherine Anne Meagher, PhD EirGen Pharma, Process Validation

Adejuyigbe Fajemisin Insight Centre for Data Analytics, University

Dr Hab Lidia Guzy University College Cork, National University of

Adam Schwimmer Weizmann Institute, Israel, Professor of Physics

David Harel Weizmann Institute of Science., Professor of Computer

Science, Vice President, Israel Academy of Sciences; Foregn member,

ryam Barad Tel Aviv University, Israel, Professor of Industrial

Rami Haj-Ali Tel-Aviv University, Nathan Cummings Professor of

Mechanics, The Nathan Cummings Chair in Mechanics

NAE; Fellow, AAAS, ACM, IEEE.

adraig Flattery Maynooth University, Ireland., Climate Change PhD

Sara McCloskey University College Cork, Computer Science Student Engineering

Researcher of aquatic pollution, Chemistry, biology

aria Nogal Trinity College Dublin, Research Felllow

Maeve Sullivan MICI, Development Chemist

r Antoinette Reid Marine Institute, Scientist

Darari Free University of Bolzano, Italy, Computer science PhD Artificial Intelligence milo Delgado-Correal University of Ferrara-IRAP, Astronomy Lecturer in Mathematics, Statistics & Applied Mathematics Paolo Tomeo Polytechnic University of Bari, PhD Student in a Durocher Gran Sasso Science Institute, Physics PhD student ul Watts Dept. of Theoretical Physics, NUI Maynooth, Lecturer

mohiro Inagaki Hiroshima University, Professor of Physics shihiko Nakamura University of Tokyo, Professor of Robotics Ihiro Jo Kyushu University / YCAM, Associate Professor of Tabata Osaka Prefecture University, Emeritus Professor Akai Niigata University, Emeritus Professor of Mineralogy Olaf Witkowski Earth-Life Science Institute, Tokyo Institute of atrick Thomas Ward Dublin City University/Alltech Biotechnology, va Uchida Columbia University in the City of New York. l Oceanography PhD student, 2014 Awardee of Heiwa

Wesley J. Metzger Radboud University, Nijmegen, Netherlands, Technology / Institute for Advanced Study, EON Research Scientist Wim A. Smit University of Twente, the Netherlands, Professor Michael Lyons Ritsumeikan University, Professor of Image Arts and Emeritus of Science, Technology and Society Blume Department of Anthropology, University of Amsterda Jan Treur Vrije Universiteit Amsterdam, Professor of Artificial Robert Babuska Delft University of Technology, Professor of Intelligent Control and Robotics Jurriaan Schmitz University of Twente, Professor of Electrical ngineering, Senior Member, IEEE Rineke Verbrugge Institute of AI, University of Groningen, Professor

Mons Lie Norske leger mot atomvåpen, Retired professor of surgery of Logic and Cognition Johan Kwisthout Donders Institute for Brain, Cognition and Behaviour, Assistant Professor of Artificial Intelligence Riccardo Ferrari TU Delft, Assistant Professor in Engineering, Marie Tom Heskes Radboud University Nijmegen, Professor of Computer ichael R.R. Good Nazarbayev University, Assistant Professor of of Human-Technology Interaction hair of the IUSS Soil Chemistry Commission

Physics, American Association of Physics Teachers Award Francesco Sica Nazarbayev University, Assistant Professor of Anatoli Vakhguelt CEng FIMechE, FIAust, Professor of Mechanical

Djoerd Hiemstra University of Twente, Associate Professor of Search Wijnand IJsselsteijn Eindhoven University of Technology, Professor Gusz Eiben VU University Amsterdam, Professor of Artificial n H. van Maarseveen University of Amsterdam, Professor of Daniel Baumann University of Amsterdam, Professor of Theoretical

Hanumantha Rao Kota Norwegian University of Science and Joost Reek University of Amsterdam, Professor in Chemistry, KNAW Ferdinand Alexander Bais University of Al, Professor of Physics, Ext.faculty Santa Fe Institute Roessingh University of Amsterdam, Assistant Professor ssor in Future Planet Ecosystem Studies, Member International Technology, Professor of Environmental Chemistry, Member, The Kamaludin Dingle Gulf University for Science and Technology, Biogeographical Society, Dutch Society for Mining and Geology,

Royal Norwegian Society of Sciences and Letters Assistant Professor of Applied Mathematics Dutch Earth Foundation Ronald Koes University of Amsterdam, Professor of Genetics Roel Beetsma University of Amsterdam, Professor of Economics Erik van der Sluis University of Amsterdam, Associate Professor of n L. van den Broek Utrecht University, The Netherlands, eroen G.W. Raaijmakers University of Amsterdam, The Netherlands, Emeritus Professor of Cognitive Psychology, International Member American Philosophical Society Maurits W. van der Molen University of Amsterdam, Professor Emeritus, Society for Psychphysiological Research sper van Wezel University of Amsterdam, Associate Professor of Juris Borzovs University of Latvia, Professor of Information technology, Corresponding Member, Latvian Academy of Sciencees ohannes M. Schumacher University of Amsterdam, Emeritus

Bernadette Pree University of Bergen, Norway, Researcher in Annette Samuelsen Nansen Environmental and Remote Sensin 3ob van der Zwaan ECN, University of Amsterdam, Johns Hopkins University (Bologna, Italy), Professor of Sustainable Energy øndell, Pulmonologist, Ph[Technology, Council Member, Pugwash Conferences on Science and Låg Norwegian Institute of Public Health, Senior Scientist, Norwegian Society of Pharmacology and Toxicology n Øvrevik Norwegian Institute of Public Health, Department on Heggland Norwegian University of Science and Technology, Conrado Bosman University of Amsterdam, Assistant Professor RN). Physics doctoral student n K. Kegel Utrecht University, The Netherlands, Professor of Camer Vishi, PhD candidate

An Open Letter from Scientists in

Support of the UN Nuclear Weapons Negotiations

Nuclear arms are the only weapons of mass destruction not yet prohibited by an international convention, even though they are the most destructive and indis-

fires and smoke from as few as a thousand detonations might darken the atmosphere enough to trigger a global mini ice age with year-round winter-like condi-

tions. This could cause a complete collapse of the global food system and apocalyptic unrest, potentially killing most people on Earth – even if the nuclear war in-

idents and false alarms that could trigger all-out war, and relying on never-ending luck is not a sustainable strategy. Many nuclear powers have larger nuclear ar

But there is also cause for optimism. On March 27 2017, an unprecedented process begins at the United Nations: most of the world's nations convene to negotiate

Robert Spreeuw University of Amsterdam, Associate Professor of

Natural Sciences, Emeritus Professor of Physics, Member Russian

Academy of Sciences, Member Ukrainian Academy of Sciences,

Arno Siebes Universiteit Utrecht, Professor of Algorithmic Data

hristoph Weniger University of Amsterdam, Physics Assistant

Henk Jager University of Amsterdam, Emeritus Professor of

Edith de Leeuw Utrecht University, Professor Methodology

Knight of the order of Oranje Nassau

ofessor on Software Engineering

Professor of Ethics and Technology

Aimee van Wynsberghe Technical University of Delft, Assistant

aura Hollink Centrum Wiskunde & Informatica, Researcher

iuseppe Soligno Utrecht University, Post-Doctoral researcher in

Sciences, postdoc in Glaciology, lecturer in Physical Geography

Ronald de Haan Technische Universität Wien, Postdoctoral

eorgios Kapidis, Computer Science grad student

Liesbeth Slechtvalk, Research Assistant

nitri Yousef Yengej University of Amsterdam, Neuroscience PhD

Edvard I. Moser, Norwegian University of Science and Technol-

Arne Brataas Norwegian University of Science and Technology,

Hans Martin Seip Dept. of Chemistry, University of Oslo, Professor

cience and technology, Trondheim, Norway, Professor of physics

ens O. Andersen Norwegian University of Science and Technology,

Professor of Physics, APS Fellow

Tonje Strømholm, Chief Medical Officer

ssociate Professor in Marine Ecology

Per Fugelli University of Oslo, Professor of Social Medici

Kirsten Kjelsberg Osen University of Oslo, Professor emeritus

University of Iceland, Professor of General Practice/Family Medicine

Technology, Professor of Medicine, Norwegian Activity of Science and

ostein Holmen Norwegian University of Science and Technology

St. Olav, Knight, First Class (Ridder av 1. klasse av St. Olavs orden)

Kristin v Hirsch Svendsen Norwegian University of Science and PhD student

Tobias Schmidt Slørdahl Norwegian University of Science and

Steinar Westin Norwegian University of Science and Technology,

gvild Saltvedt Norwegian University of Science and Technology

gunn Harstad Norwegian University of Science and Technology,

Borghild Roald Faculty of Medicine, University of Oslo, Norway,

ørn Larssen, Research Director and Adjunct Professor of

Rikke Bramming Jørgensen Norwegian University of Science and

Per-Olof Astrand NTNU - Norwegian University of Science and

Jonas Persson Norwegian University of Science and Technology,

Eivin Røskaft Norwegian University of Science and Technology,

Professor, The Royal Norwegian Society of Sciences and Letters

Yngvar Olsen Norwegian University of Science and Technology,

Jessica Louise Ray University of Bergen and Uni Research,

Elisabeth Halvorsen UiT The Arctic University of Norway, Post

Lena Seuthe UiT - The arctic university of Norway, Postdoctoral

elina Väge University of Bergen, Post-doctoral research fellow in

Jan Egil Afset Norwegian University of Science and Technology,

Professor of medicine, The Norwegian Medical Association

ygve B Leergaard University of Oslo, Professor

echnology, Professor of Chemistry

Professor of Biology

Microbiology Researcher

fellow marine biology

Technology, Associate Professor of Occupational Hygiene

Trond Peder Flaten Norwegian University of Science and

Marite Rygg NTNU - Norwegian University of Science and

Sigurd Steinshamn Norwegian University of Technology and

Technology, Associate Professor of Medicine

echnology, Professor of Occupational Hygiene

Science, Trondheim Norway, Professor of Medicine

Marit Grønning, Professor of Neurology

NTNU), Associate professor

Technology, Professor of Medicine

Professor in Medicine

John G. Maeland University of Bergen, Norway, Professor in

Hans Einar Krokan Norwegian University of Science and

member of Lithuanian Robotics Association

Mexico, Professor of Mechatronics Design, Mexican Society of

Manuel Reyes Cortes Universidad Autonoma De Chihuahua

na Maria Cetto Instituto de Fisica, UNAM, Professor of Physics

elia-Tecnologico Nacional de Mexico, Research Professor

inable Complex Systems Engineering, Member, Academia

bility: Profesor con Perfil Deseable

hoacana de Ciencias; Member: National Council of Science and

ardo Garrido Tecnologico de Monterrey, Mexico., Professor of

quin Salas Instituto Politécnico Nacional, Professor

nder Gelbukh Instituto Politécnico Nacional, Research

co, Professor of Industrial & Operations Engineering, Edelman

erto Simpser ITAM, Mexico City, Associate Professor of Political

r of International law at ITAM (Mexico City), International

los Bernal Instituto tecnológico Autónomo de México (ITAM),

Guerrero Instituto Tecnologico Autonomo de Mexico

Full Professor of Statistics, National Researcher (Level

al Association: Former Director of the International Ibstitute of

Member, Mexican Academy of Sciences; Elected member,

ernational Statistical Institute; Former President of the Inter-

merican Statistical Institute; Former President of the Mexican

Carlos A Reyes Garcia INAOE, Full Time Researcher

Governace and Inclusion Department

rnando Muñoz Negron Instituto Tecnológico Autónomo d

hanical Engineering, Fellow

Mexico, Professor of Geology

of Research in Computer Science, ECCAI EuRAI Fellow Marcos Cramer University of Luxembourg, Postdoctoral researcher

a ban on nuclear arms, to stigmatize them like biological and chemical weapons, with the ultimate goal of a world free of these weapons of mass destruction. Y

support this, and urge our national governments to do the same, because nuclear weapons threaten not merely those who have them, but all people on Earth.

Frank Linde Nikhef, Universiteit var

Physics KNAW member

senals than needed for deterrence, yet prioritize making them more lethal over reducing them and the risk that they get used.

volved only a small fraction of the roughly 14,000 nuclear weapons that today's nine nuclear powers control. As Ronald Reagan said: "A nuclear war cannot be won

tunately, such a war is more likely than one may hope, because it can start by mistake, miscalculation or terrorist provocation. There is a steady stream of ac-

nas Blomberg Ghini Norwegian University of Science and chnology(NTNU) / European Organization for Nuclear Resear chnology, Medicine Phd student ne Aasdahl Norwegian University of Science and Technology, PhD lend Hassel Norwegian University of Science and Technology, PhD student in clinical medicine van Winden University of Amsterdam, Emeritus Professor of

> vare Development Lead Naumana amjad University of Punjab, Associate Professor

Liaur Rahman Abdul Wali Khan University Mardan. Pakistan, Assistant Professor of Microbiology, Member of Pakistan Society for istan, Assistant Professor, Alumuni Association of the University of Fahim Nawaz Department of Economics, University of Peshawar akistan. Lecturer in Economics Zahid Hussain Shamsi, Assistant Profess Anjum Alvi Lahore University of Management Sciences, Pakistan, In Tariq University of the Punjab, Lecturer ashad M. Ramzan UAE University, Alain, United Arab Emirates, ofessor of Electrical Engineering, Sensir Member IEEE Dr. Naeem Ejaz University of Engineering & Technology Taxila,

mmad Arif Lodhi Abdul wali khan university, Professor or, Member Pakistan Mathematical Society and Punjab Saeed Lahore University of Management Sciences (LUMS), istan, Assistant Professor, Department of Humanities and Social

Political science scholar American political science associa

ru, Professor of Microbiology, Fellow, Peruvian Microbiology

Maria Vircikova MATSUKO, Chief Innovation Officer, Student of the Joan P. Sanchez Pellicer Universitat Pompeu Fabra, Predoctoral

GAMS Jozef Stefan Institute, Professor of AI, Researcher, iber of national Engineering academy o Berce University of Ljubljana, Professor of Social Informatics lartin Gjoreski Department of Intelligent Systems, JSI, Computer

Science, Director: Centre for Artificial Intelligence Research Harro von Blottnitz University of Cape Town, Professor of Chemical Food Technology Andre E. Botha University of South Africa, Associate Professor of Ramoshweu Solomon Lebelo Vaal University of Technology,

Logic, Bennit.AI, The Student Hub, President & Founder, MIIA; CEO Gothenburg, Professor of Linguistics

Acting Deputy-Vice Chancellor (Research, Innovation and gagement), Deputy Vice-President of the South African Chapter e Organisation of Women in Science in the Developing World herry Bremner University of Cape Town and University of Kwa-Laura Blamey University of Cape Town, Marine Ecologist Vali Yousefi Hounory lecturer at the University of the Witwatersrand, udith Alcock-Zeilinger University of Cape Town, Physics PhD Brent Harrison University of Cape Town, Physics grad student

iminate weapons ever created. We scientists bear a special responsibility for nuclear weapons, since it was scientists who invented them and discovered that their effects are even more horrific than first thought. Individual explosions can obliterate cities, radioactive fallout can contaminate regions, and a high-altitude electronagnetic pulse may cause mayhem by frying electrical grids and electronics across a continent. The most horrible hazard is a nuclear-induced winter, in which the

low, Korea Game Society; Fellow, IEEE

nics, Honor Fellow, Spanish Economic Association

go Fischer Institute for Cross-Disciplinary Physics and Comp Systems IFISC (UIB-CSIC), Professor of Physics Pablo Bustos University of Extremadura, Spain, Professor of ntonio Arauzo-Azofra University of Cordoba, Associate Professo Carles Sierra Spanish National Research Council, Professor of mon Carbó-Dorca University of Girona (Catalonia) Spair neritus Porfessor, Narcis Monturiol Medal vid Sanchez University of the Balearic Islands, Professor of Jurjo Torres - Santomé, Professor of Curriculum Studies versity of A Corunna Spain e Laborda-Fernandez Universidad de Castilla-La Mancl ember Societat Catalana de Física s**é M. Ruano** Complutense University of Madrid, Professor o Political Science, President of EUROPA Scientific Council José Álvarez-Junco Universidad Complutense, Madrid, Emeritus ciate professor of mechanical engineering <mark>ancisco Javier Ruiz-Sánchez</mark> University of Valencia, Spain, Rafael Crespo Universitat de València (Spain), Professor of athematical Analysis, Member RSME, Spain afael Calduch Cervera, Senior Professor of Public International

> Curt Nyberg University of Gothenburg, PhD in Physics Drasko Draskovic CERN, Senior Fellow, CERN Andrea Popp ETH/Eawag, PhD student Hydrology

erkan Cabi DeepMind, Research Scientist Computer Science f Nottingham, Postdoctoral Researcher ristopher Markou The University of Cambridge, Faculty of Law, PhD Candidate, Leverhulme Centre for the Future of Intelligence nrico Daga The Open University, PhD Student aleria Burdea University of Nottingham, PhD student in Economics Krste Asanovic University of California, Berkeley, Professor of Michael Nicholson University of Edinburgh, Physics grad student Laighléis, Physics PhD Student

Martina Kunz University of Cambridge, PhD student

Luther Power, Computer Science grad student

enjamin M Giblin University of Edinburgh, Astrophysics PhD Ellen Young Edinburgh University, Institute of Condensed matter and Complex Systems, Biophysics PhD student yan McManus The University of Edinburgh, PhD Student in avid Harland Imperial College London, PhD Student Nuclear Paddy Walker Buckingham University, PhD Student, Autonomous

Engineering PhD student

Physics Nobel Laureate Mathematics, 1979 Physics Nobel Laureate Laureate in Physics 1990 Paul Greengard The Rockefeller University, Professor of Physics, Fellow fo the Royal Geographical Society Laureate in Physiology/Medicine

John C. Mather, Senior Astrophylisicst, 2006 Nobel Laureate in L Hall University of Colorado, Boulder CO USA, Professor, 5 Nobel Laureate in Physics, Republic of France Légion d>Honneur Keith Barnham Imperial College London, Emeritus Professor of Robert W. Wilson Harvard-Smithsonian Center for Astrophysics, Senior Scientist, 1978 Nobel Laureate in Physics Kostas Stathis Royal Holloway, University of London, Professor of Richard J. Roberts New England Biolabs, Chief Scientific Officer, 1993 Nobel Laureate in Physiology/Medicine David Politzer Caltech, Professor of Physics, 2004 Nobel Laureate in Aylett Heriot-watt University, Professor of Computer Science eresa Leigh Stanford University, Professor of Neuroscience Curtis I. McMullen Harvard University, Cabot Professor of Mathematics, 1998 Fields Medalist, NAS Member Charles D. Fergusson, physicist, President of the Federation of In F. T. Winfield Bristol Robotics Laboratory, Professor of Robot nolas Kenelm Taylor Heriot-Watt University, Professor of mark, MIT, Professor of Physics, President of Future of ndrew Davison Imperial College London, Professor of Robot Vision Life Institute, APS Fellow hristopher Simon Jeffery Armagh Observatory and Planetarium, Lawrence M. Krauss Arizona State University, Foundation professor, and Trinity College Dublin, Senior Astronomer, and Adjunct Professor Chair of Bulletin of the Atomic Scientists Board of Sponsors, APS & Michael Antoniou Kings College London, Reader in Molecular Christof Koch, Chief Scientific Officer, Allen Institute for Brain Science, AAAS Fellow Nancy Kanwisher, MIT, Professor of Brain & Cognitive Sciences,

P. Redwine MIT, Professor of Physics

Physics, Distinguished Research Fellow

Professor of Geometric Physics

Reader in Mathematical Physics

rio Orsi UWE Bristol, Senior Lecturer

Edinburgh, Professor of Astrobiology, FRSE

Peter Lewis Aston University, UK, Lecturer in Computer Science

Peter J Eccles The University of Manchester, Emeritus Professor of

Moriarty University of Nottingham, Professor of Physics

ruce Stafford University of Nottingham, Professor of Public Policy

hopaedic Trauma, Editor Bone and Joint 360 Journal, Training

Dimitrios Chronopoulos University of Nottingham, Assistant

2002 Franklin Medal in Computer and Cognitive Science

RC Senior Scientific Officer (now retired)

irector; Doctorate in climate science

Tom Schaul DeepMind, AI researcher

Peter Schmid ResearchEducationDesign-RED, TU/e, Professor of

David Sterratt University of Edinburgh, Postdoctoral Researcher in

Sean O heigeartaigh Centre for the Study of Existential Risk,

Richard W. Dearden Schlumberger Gould Research, Principal

Rudi Lutz University of Sussex, Senior Lecturer in Artificial

Charles S Cockell School of Physics and Astronomy, University of

William Kenneth M. Rice Institute for Astronomy, University of

Soljačić, MIT, Professor of Physics, MacArthur Fellow John Andrew Peacock University of Edinburgh, Professor of Engineering at MIT, and director of the MIT Laboratory for Nuclear Security and Policy, Director of the MIT Laboratory for Nuclear Mark Georgeson Aston University, UK, Professor of Vision Sciences mospheric Science, Rossby Medal American Meteorolog Robock Rutgers University, Distinguished Professor of Climate Thomas Fernholz The University of Nottingham, UK, Assistant Science, Fellow of American Geophysical Union, American Meteorological Society, and American Association for the Richard Graham University of Nottingham, Associate Professor Alvin M. Saperstein Wayne State University, Professor of Physics, Thomas F. Koetzle Brookhaven National Laboratory, Senior Chemist J. Russell UMass Dartmouth, Chancellor Professor of Physics າ Simon University of Edinburgh, Professor in Mathematica James Harris Stanford University, Professor of Electrical Steven Balbus University of Oxford, Savilian Professor of Engineering, Member National Academy of Engineering, Fellow APS, Ulrich Becker MIT, Professor Emeritus of Physics, APS Fellow Tom Leinster University of Edinburgh, Reader in Mathematics Claude R Canizares MIT, Rossi Professor of Physics, NAS Member Computer Science Emeritus, NAS, NAE, AAAS, IEEE Medal of Thomas Sotiriou University of Nottingham, Associate Professor & Gregory A. Loew SLAC National Accelerator Laboratory, Emeritus David Miles Kahl University of Edinburgh, Postdoc in nuclear physics Professor and Former Deputy Director, Fellow, American Physical Claire Vallance University of Oxford, Professor of Physical Chemistry Biomedical Engineering, NSF Graduate Research Fellow, NIH Fellow **John S. Edwards** Aston University, Professor of Knowledge in Imaging Science Fellow and Informatics Jeffrey Dean Google, Inc., Google Senior Fellow, Member of U.S. Kevin Gurney University of Sheffield, Professor of Computational National Academy of Engineering, Member of American Academy of Peter Norvig Google, Director of Research, AAAS F Luca Rossi Aston University, Lecturer in Computer Science

ical Society; Fellow of American Association for Advancement of Science; Fellow of British Institute of Physic Grady Booch IBM, Chief Scientist, ACM Fellow, IEEE Fellow Michael E. Fisher University of Maryland, Professor of Physics, Michael Wellman University of Michigan, Professor of Computer Winner of Wolf Prize & Bolzmann Medal, AAAS Fellow Brian Greene Columbia University, Professor of Physics, Author, onathan King, MIT, Professor of Molecular Biolo Dennett Tufts University, Cognitive Scientist, Philosopher, el Siegel Carnegie Mellon University, Robotics Faculty, Fellow Roger Levy, MIT, Associate Professor of Brain & Cognitive Steven Minton InferLink Corp, President, Fellow, Association for the Advancement of Artificial Intelligence William Oldham University of California, Berkeley, Emeritus Gary Goldstein, Tufts, Professor of Physics Professor EECS Berkeley, National Academy of Engineering, Fellow Catherine L. Drennan, MIT, Professor of Biology and Chemistry, Sean J. Elliott, Boston University, Professor of Chemistry Bayarian Russian academies and Royal Societ Leslie Pack Kaelbling Massachusetts Institute of Technology Alexander Vilenkin Tufts University, Professor of Physics nasonic Professor of Computer Science and Engineering, Fello Leon Gunther Tufts University, Emeritus Professor of Physics lexander Glaser Princeton University, Associate Professor Hoffmann Cornell University, Frank H. T. Rhodes Professor of lustafa Suleyman DeepMind, Co-founder & Head of Applied AI Diana Marculescu Carnegie Mellon University, David Edward Humane Letters Emeritus Lucy Suchman Lancaster University, UK, Professor, Recipient of the Schramm Professor of Electrical and Computer Engineering, IEEE Paul Hines University of Vermont, Associate Professor, Electrical gineering (Energy Systems), NSF CAREER awardee David Jewitt UCLA, Professor, National Academy of Sciences, ohn C Vandervelde University of Michigan, Professor of Physics Ild M. Zebolsky Creighton University, Associate Professor ientist Emeritus, AIChE Fellow, Fellow, American Institute of Stuart Parkinson Scientists for Global Responsibility, UK, Executive Ezra Getzler Northwestern University, Professor of Mathematics, Mark Vogelsberger MIT, Assistant Professor of Physics Fellow, American Mathematical Society Joseph A Formaggio MIT, Professor of Physics David D. Jackson Dept. Earth, Planetary, and Space Science, Prof. of Muhammad Sahimi University of Southern California, Professor of eter Fisher MIT, Professor and Physics Department Head Astronomy, Breakthrough Prize in Fundamental Physics, 2015 Marya Pollack Columbia University, Assistant Clinical Professor of Psychiatry, Member, Apgar Academy of Medical Educators

Ting Wu Harvard, Professor of Genetics, NIH Director's Pioneer Kerstin Perez MIT, Assistant Professor of Physics Clarke Cabot Professor of Social Ethics, Fellow, American Academy of Aram Harrow MIT, Assistant Professor of Phys Arts & Sciences, William James Fellow, Association for Psychological Hong Liu MIT, Professor of Physics Busza MIT, Professor of Physics, Fellow, American Physical **chard Conn Henry** The Johns Hopkins University, Academy fessor of Physics & Astronomy, AAAS fellow Pascal Van Hentenryck University of Michigan, Professor of of Computer Engineering and Computer Science, Distinguished Industrial and Operations Engineering, Fellow, INFORMS and AAAI of Linguistics, Psychology and Cognitive Science, Fellow, American Academy of Arts & Sciences: American Association for the Richard Rains Los Angeles Mission College, Professor of Physics Maria Comninou University of Michigan, Professor of Mechanical igineering, Emerita, A. Noble Prize, ASME, Fellow ASME gineering, Education, and Global Health eodore Schatzki University of Kentucky, Professor of Philosophy Sciences, Fellow, California Academy of Science Ilia Teimouri Lancaster University, PhD Student in Theoretical Physics Christopher F. McKee University of California, Berkeley, Emeritus and Geography Professor of Physics and of Astronomy, Member NAS, Fellow AAAS Konstantinos Karachalios, Dr. Ing. (PhD in nuclear reactor

Vassilis Angelopoulos Earth, Planetary and Space Sciences Dept., Benjamin Kuipers University of Michigan, Professor of Computer CLA, Professor of Space Physics, Fellow, American Geophysical Union; Macelwane Medalist, AGU y Winograd Stanford University, Professor of Computer Science, Ambuj Tewari University of Michigan, Assistant Professor of Former President, Computer Professionals for Social Responsibility ana S. Nau University of Maryland, Professor, Computer Science atrick Doyle MIT, Professor of Chemical Engineering, Guggenheim Member, American Association for the Advancement of Science) pient of Godel Prize, Dijkstra Prize, and Newell Prize Jaime Peraire MIT, Professor of Aeronautics and Astronautics, Anagnostis Agelarakis Adelphi University, Professor of Biological Physics, Fellow of AAAS and APS, Sloan Fellow, DoE OJI Award Aleix Martinez The Ohio State University, Professor of Electrical and P. Crutchfield University of California, Davis, Professor of hysics, Director, Complexity Sciences Center; President, Art and Stephen I. Emlen Department of Neurobiology and Behavior, Sally Oey University of Michigan, Professor of Astronomy Cornell University, Cornell University Emeritus Professor of Behavioral Ecology, AAAS Fellow, AAAS Fellow, Past President Christos H. Papadimitriou UC Berkeley, Professor of Computer John D. Joannopoulos MIT, Francis Wright Davis Professor of ysics, Fellow of NAS, AAA&S, AAAS, APS Berndt Mueller Duke University, Professor of Physics, Fellow APS

Ken Anderson University of Colorado Boulder, Associate Dean for Fellow, American Physical Society avid L. Livingston, Professor of Electrical and Computer Thomas N. Theis Columbia University, Professor in Electrical Engineering, Fellow, American Physical Society; Fellow, Institute of Paul S. Rosenbloom University of Southern California, Professor of David Gordon Wilson M.I.T., Professor of mechanical engineering,

L. Dickinson Cornell University, Professor of Natural nber National Academy of Sciences Hobert Finn Stanford University, Professor of Mathematics, emeritus, Resources, Fellow AAAS, Fellow Animal Behavior Society, Fellow reign Member, Saxon Acad. Sci., Hon. Doc. Univ. Leipzig California Academy of Science Gordon N. Fleming Pennsylvania State Univ., Professor Emeritus of nasonic Professor of Electrical Engineering, Fellow of AAAS NYAS, AAAI, IEEE, ACM, member of National Academy of tavros Tripakis Aalto University and University of California, ert Thibadeau Robotics, Carnegie Mellon University, Seagate Health Sciences and Technology, Fellow AIMBE, BMES Albert R. Meyer MIT, Professor of Computer Science, American Academy of Arts & Science, Fellow; Association for Computing Machinery, Lifetime Fellow James E. Brau University of Oregon, Philip H. Knight Professor of ural Science, Fellow, American Physical Society; Fellow, American **cow** Baylor College of Medicine, Rice University, Assistant Hoger Blandford Stanford University, Luke Blossom Professor, FRS, Nordecai P. Blaustein University of Maryland School of Medicine, Professor of Physiology & Medicine, AAAS, Biophys. Soc. and Am Computer Science, IEEE Fellow Stephen C. Rand University of Michigan, Professor of Physics, Erik Brynjolfsson MIT, Professor seph Loeb University of Memphis, Professor of Biology (retired) /Id Sept University of Michigan, Professor and Associate Chair of Damian Lyons Fordham University, Professor of Computer Science, Biomedical Engineering, Fellow, American Institute for Medical and Wendy Freedman University of Chicago, Professor of Astronomy Lawrence Pileggi Carnegie Mellon University, Tanoto Professor Electrical and Computer Engineering Patricia J. Culligan Columbia University, Professor of Engineering

and Astrophysics, Member, National Academy of Sciences Irene Greif, computer scientist, Member National Academy of nineering, Fellow American Association for Advancement of cience, Fellow American Academy of Arts and Sciences

Inoshita, Professor of Physics Emeritus, Fellow, Amerimionkowski Johns Hopkins University, William R. Kenan, Jerome I. Friedman MIT, Emeritus Professor of Physics, 1990 Nobel

Ali Yazdani Princeton University, Class 1909 Professor of Physics, AAAS and APS Fellow, Fellow of American Academy A&S, APS, Neuroscience, 2000 Nobel Laureate Physiology/Medicine, Member, William Schultz Univ. Michigan, Fellow American Physical Soc., Professor of Mechanical Engineering, Fellow, American Physical Steven Pinker Harvard University, Johnstone Professor of Psychology, Fellow, National Academy of Sciences, American Science; Troland Medal, NAS; William James Fellow, APS; Elected Fellow, American Academy of Political Science

bert Savit University of Michigan, Ann Arbor, MI, Professor of ciety, and a Humboldt Foundation Research Award. He has ted a foreign member of the Academy of Europe, a Fellow of the Alessandro Duranti University of California, Los Angeles, merican Geophysical Union and Geological Society of America avid W. Gidley University of Michigan, Emeritus Professor of istinguished Professor of Anthropology, AAAS Fellow Physics, Fellow, American Physical Society Nicholas Newman MIT, Emeritus Professor of Naval Architecture usan Carey Harvard University, Fellow of NAS, Professor of Andrew Howard California Institute of Technology, Professor of of Computer Science, AAAI Fellow Karl K. Berggren MIT Dept. of EECS, Professor of Electrical Brent Gillespie University of Michigan, Professor of Mechanical ngineering, Fellow of AAAS and IEEI sics, Fellow, American Physical Society J. Stewart Smith Princeton University, Professor of Physics A. Steiner MIT, Professor of Biology Brian J. Cantwell Stanford University, Professor of Aeronautics and stronautics, member National Academy of Engineering, Fellow , Fellow of the AMS and of American Academy for the air Boettiger Stanford University, Assistant Professor of Developmental Biology, Fellow, Burroughs Wellcome Fund Karen Smith U Michigan, AMS Fellow, Professor of Mathematics, nerican Mathematical Society Fellow Kazuhiro Saitou University of Michigan, Ann Arbor, Professor of

Planetary Sciences, James B. Macelwane Medal of the American

enheim Fellow (Engineering 2014)

ficrobial Biology, AAAS Fellow

tatistics, NAS, NAE and AAAS Fellow

ge W. Clark MIT, Professor of Physics, Emeritus nny Calegari University of Chicago, Professor of Mathematics, chael Freeling University of California, Berkeley, Professor of Philip Lawrence Hoe University of Michigan, Professor of Aerospace es A. Pierce California Institute of Technology, Professor of Applied & Computational Mathematics and Bioengineering, ng Lai Cornell University, Professor of Astrophysics Wesley E. Snyder North Carolina State University, Professor Qiaobing Xu Tufts university, Professor of biomedical engineering, ernard Shiffman Johns Hopkins University, Professor an den Bosch Yale University, Associate Professor of nk Massachusetts Institute of Technology, Profe Daniel J. Inman University of Michigan, Professor Aerospace y, President American Association for Advancement of Science homas D Bruns University of California, Berkeley, Professor, Plant an Sugarman Princeton University, Professor of Psychology Marcelo Gleiser Dartmouth College, Professor of Physics and Fulbright Fellow, Guggenheim Fellow Engineering, Director of Andlager Center for Energy and the Courtney Johns Hopkins University, Professor and Chair, id Bercovici Yale University, Professor of Geophysics, e Jegelka MIT, Assistant Professor of EEC Macelwane Medal American Geophysical Union, Fellow American Alexander Beilinson University of Chicago, Professor of ophysical Union, Member American Academy of Arts & Sciences Seth Lloyd MIT, Professor of Mechanical Engineering, Fellow, Michael B. McElroy Harvard University, Professor of Environmental Michael Jordan University of California, Berkeley, Professor of

Academy of Sciences; Shaw Prize

hemistry, Fellow, American Physical Society

Iullis C. Onstott Princeton University, Professo

ristine Drea Duke University, Earl D. McLean Professor of

Susan Hespos Northwestern University, Associate Professor of

Mark Reimers Michigan State U, Professor of Neuroscience

ad Ganim Yale University, Assistant Professor of Chemistr

és Ibáñez University of Michigan, Associate Professor of Ecology

Environmental Sciences, Honorary Member Award, Ssoc. Vert. Paleo.

Lauren Emberson Princeton University, Assistant Professor of

Andre Platzer Carnegie Mellon University, Associate Professor of

Adrian Lenardic Rice University, Professor of Geophysics and

Jesse Wolfson University of Chicago, L.E. Dickson Instructor of

Robert A. Bloodgood University of Virginia, Professor of Cell

Charles Cole Geisel School of Medicine at Dartmouth, Professor of

Stephen C. Nelson Northwestern University, Assistant Professor of

B. Patterson Caltech, Assistant Professor of Physics

Keith Evan Green Cornell University, Professor of Design and

ongwei Zhang Massachusetts College of Pharmacy and Health

es University, Assistant Professor of Pharmaceutics

Mark Borsuk Duke University, Associate Professor of Civil and

Center, Solomon Professor of Neuroscience, Emeritus

Dragan Huterer University of Michigan, Associate Professor of

Brian K. Arbic University of Michigan, Professor of Physical

Physics, Emeritus, Member, U.S. National Academy of Science

Ronald John Allen Space Telescope Sci. Inst. and Johns Hopkins U.,

Biochemistry and Cell Biology

Wu Collegiate Professor of Physics

Professor Emeritus, Turing Prize recipient

Zosia Krusberg Northwestern University, Associate Professor of Chemistry, member AAAS, UCS

nuclear energy advisory committee; senior fellow, breakthrough lation Pharmaceuticals

Natasha Kirienko Rice University, Assistant Professor, BioSciences

Peter W. Atkinson Private Sector, Managing Director

James S. Langer University of California, Santa Barbara, Professor Jeffrey Bingham, Roboticist

Nai Phuan Ong Princeton University, Eugene Higgins Professor of Electrical Sciences

Heidi B. Kaplan, Associate Professor of Microbiolog

ohn C. Schotland University of Michigan, Professor of

Alfred T. Goshaw Duke University, Professor of Physics

Brudvig Yale University, Benjamin Silliman Professor and Chair

Iobias Marriage Johns Hopkins University, Professor of Physics and Computer Science

Barbara L. Finlay Cornell University, WR Kenan Jr Professor of

Edward F. Leonard Columbia University, Professor of Chemical and Shreesh Mysore John's Hopkins University, Assistant Professor, Rebecca Jean Emigh UCLA, Professor of Sociology and Statistics omas B. Sheridan MIT, Professor Emeritus ogical Sciences, 2006 Rank Prize for Optoelectronics stopher L. Magee MIT, Professor of the Practice (IDSS and Anind Dey Carnegie Mellon University, Professor of Computer a M. Raman Northwestern University, Professor of Neurobiology Biology and Biological Engineering ynthia Moss Johns Hopkins University, Professor of Psychological Industrial Engineering and Operations Research, Member, National and Brain Sciences, AAAS Fellow, Acoustical Society of America ndreas Mueller Columbia University, Lecturer in Data Science cott Aaronson University of Texas at Austin, Professor of Computer Bischotberger Irmgard MIT, Assistant Professor Mechanical ong Feng Chen Mass Eye and Ear, Harvard Med School, Associate Nancy Hopkins MIT, Professor of Biology, Member NAS, AAAS, olecular Biophysics, member NAS Kyle David Bayes UCLA, Professor of Chemistry Emeritus Frederik J. Simons Princeton University, Associate Professor of

Duncan Menge Columbia University, Professor of Biology, Early Career Fellow, Ecological Society of America Professor of Chemistry, 2015 MacArthur Fellow Carl Heiles, Professor of Astronomy Helen R. Quinn Stanford university, Professor Emerita Particle vsics and Astrophysics, Member US National Academy of Science, thew Fisher UC Santa Barbara, Professor of Physics, National ochemistry and Molecular Biophysics nn H. Schwarz California Institute of Technology, Professor of Director of Nordita; Fellow, American Physical Society

Leela Fernandes University of Michigan, Professor of Women's Garrison Cottrell UCSD, Professor of Computer Science and nen Zoghbi University of Michigan, Astrophysicist Michael M.J. Fischer MIT, Prof. of Anthropology and Science and aul Segall Stanford University, NAS, Professor of Geophysics Pederson Johns Hopkins University, Research Professor, Member, National Academy of Sciences Janet Sinsheimer UCLA, Professor Human Genetics and v Emonet Yale University, Associate Professor of Biology and

Deep Machine Learning

Genetics of Cancer, Member, New York Academy Science

residence, USA, Retired Professor of Geography

Ken Olum Tufts, Research Professor of Physics

Christian Szegedy Google Inc., Research Scientist

Brett Bethke Airware, Senior Software Architect

Steve Omohundro Possibility Research, Scien

Computer Science

Hasan Zahid NA, Computer Science undergrad, N Cristiano Giardina, Entrepreneur arol Hausman USC, Robotics PhD studen Charles Elkan University of California, San Diego, Professor of Carlo H. Sequin EECS Computer Science, University of California, Berkeley, Professor of Computer Science, U C Berkeley Ankit B. Patel Rice University, Baylor College of Medicine, Professor of

Kyle Bishop Columbia University, Associate Professor of Chemical

Stephen Moore, Ph.D. Brigham and Women's Hospital and Harva Science, Member, American Academy of Arts and Sciences Niels D Schonbeck Regis University, Denver, CO, Professor of Shayan Srinivasa Garani Indian Institute of Science, Professor of Josef Dadok CMU, Professor of Chemical Instrumentation Nancy Hopkins MIT, Professor of Biology, Member NAS, AAAS,

and Technology Policy, 1993-1994, MacArthur Fellow, Leo Szilard Prize, Marla Geha Yale University, Professor of Astronomy and Physics American Physical Society Dirk R. Englund MIT, Associate Professor of EECS Nima Dehghani MIT Physics, Postdoc, Physics and Neuroscience Fred C Adams University of Michigan, Professor of Physics, Ta-You

Robert L. Elgin PhD in Physics from Caltech, retired Energy Analyst, member, American Physical Society Gina Wimp Georgetown University, Associate Professor of Biology

Margaret S. Race, Ph.D. SETI Institute, Sr. Scientist, Planetary Avery Sauls Northwestern University, Professor of Physics

Tang Chiao Retired Physicist from LLNL, Livermore -ernando J. Corbato M.I.T., Electrical Eng. & Computer Sci. Dept., Zia Mian Princeton University, Co-Director, Program on Science and Global Security, Linus Pauling Legacy Award School of science and Mathematics Oliver Kripfgans University of Michigan, Associate Professor of Arun Tejasvi Chaganty Stanford University, PhD in Computer Science Mazen Al Borno Stanford University, Postdoctoral Fellow Mark B. Moldwin University of Michigan, Professor of Climate and John Lazzaro CS Division, EECS, UC Berkeley (retired), Research David W. Aha AI Researcher, Computer Scientist Matthew Luciw Neurala, Principal Robotics and Vision Scientist

Randal Koene Kernel LLC, Chief of Computation and Systems Strategy

McDonald Matika University of Zimbabwe, Occupational Psychologeneers of Computation and Systems Strategy

ner Linke NanoLund, Lund University, Professor of Nanophysics Nattias Richter Lund University, Professor of Physic

Gösta Gustafson Lund University, Professor of Theoretical Physics irik Waltersson Europaskolan i Strängnäs, Lecturer in Physics, PhD Rikard Enberg Uppsala University, Associate Professor of Physics Kalle Aström Centre for Mathematical Sciences, Lund University, lexander Prokofiev Uppsala University, Assoc. Prof. of Applied our KTH, Postdoc of Computer Science, Multiple best efan Deneberg Karolinska Institutet, M.D, Ph.D, Swedish AML homas Weibull Chalmers University of Technology and the ngineering Mechanics Oragi Anevski Mathematical Sciences, Lund University

Vohannes Svensson Lund University, Sweden, Researcher in Markus Borg RISE SICS AB, Senior Researcher Peter Mannfolk Lund University, Sweden, PhD, Medical Radiation isa Brange Lund University, PhD student in Energy Science Florinda Viñas Lund University, Physics PhD Student Caterina Doglioni Lund University, Biträdande Lektor an Patrik Edén Lund University, Researcher in computational Hadi Banaee Orebro University, Sweden, Computer Science grad herese Forsberg Lund University, PhD student in electronics Fredrik Nilsson Lund University, Sweden, Physics grad student Noemi Schaffer, Astrophysics PhD Student John Falk Lund University, PhD student in atmospheric science Reinhold Lund University, Mathematical statistics PhD aw and International Relations, Former Deputy in Congress of ed Kronvall Lund University, PhD student in Mathematical Statistics

Canizares Complutense University of Madrid, Associate os Yela University Complutense of Madrid, Professor of ardo Sanmartín Arce Universidad Complutense de Madrid, in, Professor of Social Anthropology, Member, Royal Academy of sor of Politics and Administrative Science ie Sanmartin University of Valencia, Full Professo Methodology of the Behavioural Sciences, Medal "Five Centuries" of the University of Valencia Joan Bertomeu Universitat de Barcelona, Associate Professor of and School Organization A. Moral Santin Universidad Complutense de Madrid (UCM), ejandro Miquel Novajra Dpt. of Philosophy. University of Balearic lands /Spain), Professor of Social Anthropology ntonio J. Criado Complutense University of Madrid, Professor of **_uisa Blazquez Izquierdo** University Complutense of Madrid sor of Material Science and Metallurgical Engineering

blores Escalera Rodríguez URJC, Assistant Profesor in terials science and Engineering Concha Merino Universidad Complutense Madrid, Spain, Professor Gonzalo Álvarez Chillida Universidad Complutense de Madrid Neuroscience of Castilla y Leon, Professor of Histology ique Saldaña Neuroscience Institute of Castilla y León (INCyL), niversity of Salamanca, Spain, Professor of Histology Miguel A. Merchan University of Salamanca, Professor of Cell ogy, Member of Academy of Medicine of Salamanca. Member of

ernando Sanchez-Beato University Complutense Madrid. Spain,

epción Gomez Universidad Complutense de Madrid, Associate

LIO LAMO DE ESPINOSA Universidad Complutense, Emeritus

ario Ramirez Complutense University of Madrid, Associate

uís Ros Institut de Robòtica i Informàtica Industrial (CSIC - UPC),

Pedro Meseguer Spanish Council for Scientific Research, Researcher

milio Hernandez-Garcia IFISC (CSIC-UIB), Palma de Mallorca,

Roberto Carballedo University of Deusto, Lecturer & Researcher

Aureli Soria-Frisch Starlab Barcelona SLU, R&D Manager and

Matteo Lostaglio The Institute of Photonic Sciences (ICFO),

Tamara Rodríguez-Ramos Spanish Institute of Oceanography,

Gemma Boleda Universitat Pompeu Fabra, Senior researcher

of the Spanish National Research Council (CSIC), President of the

Oscar Margenet Nadal Secretary of ARC PEACE (International

Mahiques Sifres, Research helper at UPV

Fabrizio Guzzetta Universitat Jaume I (Spain), Chemistry grad

Catalan Association for Artificial Intelligence (ACIA)

iulia Illuminati IFIC, Physics PhD student

Rial Conde Instituto Español de Oceanografía, Postdoctora

cos Quevedo Diaz Centre for Genomic Regulation, Biomedicina

ostdoctoral researcher, 2016 Forbes 30 under 30 Europe list under

Professor of Political Science and Public Administration, Member

Spanish Academy Public Administration. Member, Complutense

Jose M. Gomez Cama Universitat de Barcelona, Professor of

ociology Professor, Spanish Royal Academy

ulty researcher (Robotics and Automation)

ego José Bodas Sagi, Data Scientist

n Computer Science, EurAI Fellow

regorio de Miguel Casado University of Zaragoza, Assistant Javier Forment Universitat Politècnica de València, Spain, Associate Alberto Nájera López University of Castilla-La Mancha, Spain., Antonio Sánchez Ruiz-Granados Universidad Complutense de Madrid, Associate Professor of Computer Science ngel Garcia Olaya Universidad Carlos III de Madrid, Spain, ciate Professor of Computer Science

ssociate Professor, Chair of Environmental Safety and Sustainable

осферной Общественной академии наук, сертифицированный

f natural Science, Leibniz Academy (Germany)

III Rudenko University of Chicago, Postdoc in mathematics

runo Bauwens National Research University Higher School of

ussian Academy of Sciences, Professor of Economics, Head of

odrigo Lopez-Pablos UTN, ITMO University, AI Researcher

rgey Novikoy Moscow Institute for Physics and Technology, Fre

searcher, Member, International Academy of Creative Endeavors

delsalam Alsarkhi, Professor, mechanical engineering

phammad Rezwanul Quddus King Fahd University of Petroleum

Vladimir Matveenko National Research University Higher School of

drey Losev HSE, Professor of Mathematics

conomics. Assistant professor

Vladimir Lebedev MIEM HSE, Professor of Mathematics

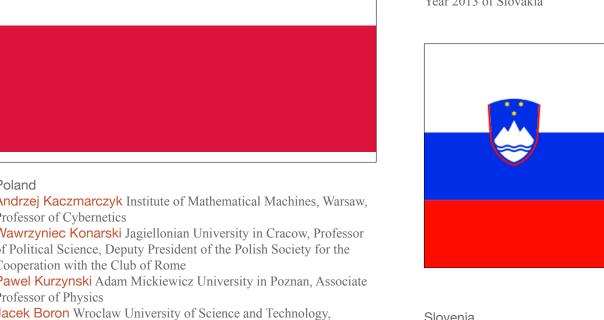
ладимир Оноприенко Ноосферная общественная академия

наук профессор Российской акалемии естествознания член

Development of Regions

arak Bin Subukutheen Nanyang Technologic

iversity, Singapore, Mechanical Engineering Post Graduate Student,



Adam Ostolski University of Warsaw, Associate Professor of mierz Pater K6 WPPT TUW Wrocław Poland, Senior Lecturer of bigniew Gumienny, Doctor of Physics

nytro Vodianyk Warsaw University of Technology, Institute of

offessor of Informatics Engineering

ofessor of Computer Science

Costin-Gabriel Chiru University Politehnica from Bucharest,

Daniel David Babes-Bolyai university, Cluj-Napoca, Romania,

lonut Mironica University Politehnica Of Bucharest, Associate

Andreea Milescu (Urzica) Universitatea Politehnica Bucuresti,

Sergiu Eftimie Military Technical Academy, Bucharest, Romania,

Liviu Vladutu Politehnica University of Bucharest, Lecturer Dr

Assistant Professor Computer Science Department

<mark>efan Trausan-Matu</mark> University Politehnica of Bucharest, Romania

Associate Professor

Academy of Cognitive Therapy, USA

odrigo Martins de Matos Ventura Instituto Superior Técnico enrique Lopes Cardoso University of Porto, Portugal, Assistant Pedro U. Lima Instituto Superior Tecnico, U. Lisbon, Portugal, Baudouin Jurdant University Paris Diderot (Paris 7), Professor João Balsa da Silva University of Lisbon, Assistant Professor of (NTNU), Professor in Medicine, 2011 The Royal Norwegian Order of Luís M. P. Correia Universidade de Lisboa, Portugal, Associate

Cesar Figueiredo Pimentel Instituto Superior Tecnico - Lisboa, Senior Lecturer Mathematics, Member, South African Mathematical Gonzalo De Polavieja Champalimaud Foundation, Lisbon, PI in Society and International Association of Advanced Materials Hans Egmont Rohwer NMMU, Emeritus Professor in Chemistry loão Carlos Ferreira Gonçalves University of Coimbra, Informatics Kiran Odhav, Lecturer Nuno Andrade da Cruz Henriques ULisboa, Cognitive Science PhD G. du Toit North-West University, Professor, DST/NRF ARCHI Research Chair in Nuclear Engineering, Member, European cademy of Science; Pr.Eng.; Member South African Academy of Adelaja Osibote Cape peninsula Uiniversity of Technology, South Jakobus Ernst van Zyl University of Cape Town, Professor of avid jacobs University of Cape Town, Professor of Biological Bruce Bartlett Stellenbosch University, Senior Lecturer of f Electronic Engineering, Fellow South African Academy of Jacques Ludik Machine Intelligence Institute of Africa, Cortex Professor of clinical cognitive sciences, International Diplomate of the

ulu Natal, Post-doctoral Researcher in Physics

lyiola Olatunji Otunniyi Vaal University of Technology, South Africa, Norwegian Academy of Sciences, Board of Trustees of the Nobel Brian Heap University of Cambridge, Sir, Fellow of the Royal Society oundation & Member of Academia Europe DKNVS), Trondheim, Norway, Sweden, Professor Emeritus of Mathematics Pieter W Van der Walt Stellenbosch University, Emeritus Professor Scientist, Assoc. Prof. of Computer Science & Founder; Ph.D. in Computer Science (AI), President, MIIA; Smart

Ann-Marie Pendrill Lund university, Professor Science

Josef Svenningsson Chalmers University of Technology, Assistant Academia Europe. Martin Nilsson SICS, RISE (Research Institutes of Sweden), Senior and Robotics, Fellow of Royal Institute of Navigation, Fellow of Robert Feldt Chalmers University of Technology, Sweden, Professor Technology, Fellow of the Royal Society of Arts ibusiso Moyo Durban University of Technology, Mathematician, Tomas Persson Lund University, Associate Professor of Mathematics Tim Palmer University of Oxford, Royal Society Research Professor, artin H. Magnusson Solid State Physics, Lund University, Sweden,

Patrick Roche Oxford University, Professor of Physics, Fellow Ulla Holst Lund University, Sweden, Professor of Mathematical Statistics, Member, Royal Physiographical Society, Lund Jens Klingmann Lund University, Sweden, Professor in Mechanical Stefan Kröll Lund University, Sweden, Professor of Atomic Physics Fellow of NAS & Royal Society, winner of Balzan Prize Isobel Kolbe University of Cape Town, CERN, Physics PhD student Andreas Jakobsson Lund university, Professor of Mathematical Kendrick Zetie, Teacher of Physics, Fellow of the Institute of

Professor of Mathematical Statistics

Håkan Ardö LTH, Adjunct Senior Lecturer

Bengt Forkman, Professor of Physics

Knut Deppert Lund University, Sweden, Professor in Aerosolphysics fellow

Professor of Physics, Member of the Swedish Academy of Sciences, of Lords, Former President, Royal Society Bo-Sture Skagerstam Department of Physics, Norwegian University physics, Fellow of the Royal Society Science and technology, Trondheim, Norway, Professor of Charalampos Tsoumpas University of Leeds, Lecturer in Medical Physics, Elected Member of the Royal Norwegian Society of Science Imaging, Senior Member IEEE; Fellow of Higher Education Academy Harold S. Shapiro, Royal Institute of Technology, Stockholm, Yngve Sundblad Royal Institute of Technology, Stockholm, Sweden, Research Fellow in Compute Science

Daan Bloembergen, Postdoctoral researcher in Artificial Intelli-Hussai Jaffery University of Glasgow, Post-Doctoral Research Scientist, Member, Royal Society of Biology George Zarkadakis, PhD in AI, Chevalier dans le ordre des Andrei Alexandru Rusu, Researcher aia Hadsell DeepMind, Research Scientist ules Kajtar University of Exeter, Research Fellow in Climate Science Shadab Alam University of Edinburgh, UK, Postdoctoral Researcher Ralph Peter Masenge University of Dar es Salaam, United Republic Matteo Cataneo University of Edinburgh, Postdoc in Cosmology

Anthony David Gilbert Edinburgh University, Senior Lecturer in bin Mesnage King's College London, Research Associate avin Woolman University of Edinburgh, Computational Phys Anna Lisa Varri University of Edinburgh, Marie Curie Research Fellow in Astrophysics Paul Knott University of Nottingham, Physics Research Fello larcus Ebert University of Edinburgh, School of Physics ar Michael Wilson University of Edinburgh, Postdoctoral Res etta Martinelli University of Edinburgh, Postdoc in Mathematics r Gruffudd Arwel Edwards University of Edinburgh, Post-doctoral Researcher in Mathematics Giacomo Tarroni Imperial College London, Medical Image

vario Figueira, Electrical and Computer Engineering Doctorate Ansgar Koene University of Nottingham, Senior Research Fellow Andrew Philippides University of Sussex, Reader in Artificial Michael Denzel University of Birmingham, Doctoral Researcher Mohammad N. Omidvar University of Birmingham, Postdoctoral on B Lowndes NVIDIA, AI DevRel | EME Bartlomiej Waclaw University of Edinburgh, Lecturer in Biological General, International Center for Applied Thermodynamic Jishnu Bhattacharyya School of Mathematical Sciences, University Gerald Jay Sussman Massachusetts Institute of Technology Owen Brimijoin MRC Institute of Hearing Research, Senior

ugh Cameron Makerere University, Visiting Professor, Software Samuel Bennett Ramsey University of Edinburgh, Physics PhD

Dmitry Voronenko, R&D Director, PhD in Computer Science

Theoretical Physics, 2013 Nobel Laureate in Physics Stephen Hawking Director of research at Dept. of Applied Mathematics and Theoretical Physics at Cambridge, 2012 Sir Michael Atiyah Edinburgh University & Trinity College Cambridge, Professor of Mathematics, 1966 Fields Medalist Cecilia Jarlskog Dept of Phys, Lund University, Lund, Sweden,

Martin Rees Cambridge University, UK Astronomer Royal and House Alan Cottey School of Chemistry, University of East Anglia, Senior

Adam Linson University of Dundee, Research Fellow in Interactive Ansgar Koene Horizon Digital Economy Research Institute, Senior Dr Stephen Mounce University of Sheffield, Research Fellow Cognitive Science, OBE; Fellow of Association for the Advancement Bengt Nordstrom Chalmers Univ, Professor of Computer Science of Artificial Intelligence; Fellow of the British Academy; Member, Noel Sharkey University of Sheffield, UK, Emeritus Professor of AI British Computer Society, Fellow of the Institution of Engineering and Zoubin Ghahramani FRS University of Cambridge, Professor of nformation Engineering, Fellow of the Royal Society Mathematics, Fellow of the Royal Society of Edinburgh Vlad Seitan King's College London, Research Fellow in Molecular Biology, Fellow, Medical Research Council communication and physics education, Fellow IOP, Fellow APS

Lucas Lombriser University of Edinburgh, SNSF Advanced Fellow Christian Hulteberg Lund University, Associate professor, senior Fellow of the Royal Society, Commander of the British Empire, Dirac Gold Medallist of Institute of Physics Seyla Benhabib Yale University, Eugene Meyer Professor of Political Science and Philosophy, Fellow, American Academy of Arts and Joseph Silk The Johns Hopkins University, Professor of Physics,

Fellow of Institute of Physics

Neil Chadborn University of Nottingham, Public health research

Auke Bart Booij University of Birmingham, Computer Science PhD Fabio Massimo Zennaro University of Manchester, Machine

Perry, mathematician, US Secretary of Defense Leon N. Cooper, Brown University, Professor of Science, 1972 Sheldon Glashow, Boston University, Professor of Physics & Wolfgang Ketterle, MIT, Professor of Physics, 2001 Physics Astronomy, APS Fellow heoretical Physics, 2004 Nobel Laureate in Physic Leland Hartwell Arizona State University, Professor, 2001 Nobel lichael Bishop UCSF, Professor Emeritus of Microbiology and Immunology, 1989 Nobel Laureate in Physiology/Medicine and ASME Fellow Martin Chalfie Columbia University, University Professor, 2008

Yannis Tsividis Columbia University, Edwin Howard Armstrong Professor, Fellow, IEEE J. Weinland, 2012 Nobel Laureate in Physics Herschbach Harvard, 1986 Nobel Laureate in Chemistry, meritus Prof. of Chemistry, 1986 Chemistry Nobel Laureate Joseph Hooton Taylor, Jr Princeton University, James S McDonnell Richard L. Lewis University of Michigan, John R. Anderson

ndre Luiz de Gouvea Northwestern University, Professor o **lartin B. Haugh** Columbia University, Associate Professor of Physics, Fellow, American Physical Society Daniel C. Molden Northwestern University, Associate Professor of Luther Power Lancaster University, Computer Science grad student Psychology, Fellow, Society for Experimental Social Psychology John G. Kassakian MIT, Professor of Electrical Engineering, David Savitt Johns Hopkins University, Professor of Mathematics, Emeritus, Member, US National Academy of Engineering Fellow of the American Mathematical Society PS, OSA, Guggenheim and Simons Foundation odney C. Ewing Stanford University, Frank Stanton Professor in Othman Al Bahri University of Cambridge, Physics PhD studer Nuclear Security, NAE, Lomonosov Gold Medal of Russian Academy lan Condry MIT, Professor of Anthropology, Head, Global Studies Lucy Tweed Columbia Univsersity- The Lamont Doherty Earth Christopher C. Cummins MIT, Professor of Chemistry, Fellow, Gloria Silva Carnegie Mellon University, Professor of Chemistry aniel Esposito Columbia University, Professor of Chemical Academy of Sciences; 2015 Breakthrough Prize in Fundamental hael J. Fischer Yale University, Professor of Computer Science John J. Hopfield Princeton University, Professor of Biology (ret), Eric Anthony Hill Johns Hopkins University, Lecturer, Department of Tycho Sleator New York University, Associate Professor of Physics, Helmut Hofer Institute for Advanced Study, Princeton, Professor of Digby D. Macdonald University of California at Berkeley, Professor Mathematics, Member, National Academy of Sciences Muhammad Agung Santoso Imperial College London, Mechanical in Residence, Nuclear Engineering, FRSC, FRSNZ, FNACE, FECS, David A. Huse Princeton University, Professor of Physics David Ray Caprette BioSciences, Rice University, Teaching FISE, FIC, FASM, FWIC, Khwarizmi Laureate in Fundamental science, Faraday Memorial Trust Gold Medalist (SAEST), winner of Gibbs Award, Frumkin Memorial Medal, OLIN Palladium Medal Dana Small Yale, Professor of Psychiatry, Yale University School of Christopher M. Johns-Krull Rice University, Professor of Physics boratory, Director, Modern Diet and Physiology Research Center, Board Member, National Academy of Sciences Board on Behavioral, er R. Jaffe Princeton University, Professor of Civil and Cognitive and Sensory Sciences Environmental Engineering, Fellow, American Geophysical Union Evan Variano University of California, Berkeley, Professor of Civil Bioengineering Marc Davis UC Berkeley, Professor of Astronomy/Physics, Heineman Prize of the American Physical Society; the Gruber prize Michael Loriaux Northwestern University, Professor of International Professor of Astronomy Relations, French Ordre des Palmes Académiques, award-winning David John Hunter Harvard TH Chan School of Public Health, cent L Gregory Professor of Cancer Prevention, Fellow, Royal fessor of Physics and Astronomy, Member, American Academy Arts and Sciences, DoE E. O. Lawrence Award, Dannie Heineman John Toner University of Oregon, Professor of Physics, Fellow, American Physical Society; former Simons Fellow, Higgs Fellow, Jniversity of Edinburgh Steven R. Beissinger UC Berkeley, Professor of Ecology & Conservation Biology, AAAS Fellow wrence Marks Yale University, Professor of Epidemiology nvironmental Health Sciences) and Psychology, Philosophiae doctorem honoris causa, Stockholm University; Fellow, Society of Experimental Psychologists; Fellow, American Association for the George Rieke The University of Arizona, Regents Professor of Advancement of Science; Fellow, Association for Psychological Astronomy, Member, NAS Science; Fellow, American Psychology Association August Evrard University of Michigan, Professor of Physics and Felix H. Boehm California Institute of Technology, W.L. Valentine

os F. Daganzo U. California, Berkeley, Chancellor Professor of the Graduate School, Member, National Academy of Engineering Francesco Volpe Columbia University, Associate Professor of Stephen Chong Harvard University, Professor of Computer Science institute; senior fellow, berkeley institute for data science; Adrian Liu UC Berkeley, Hubble Postdoctoral Fellow Gregory Bowman Johns Hopkins University, Professor of Biophysics Josef Eisinger Mount Sinai School of Medicine, New York, Professor Luís F Seoane MIT, Postdoc, Physics and Neuroscience Jor Jovanovic University of Michigan, Professor of Nuclear J. Levine UCLA, Professor of Physics and Chemistry uncan G. Steel University of Michigan, Professor EECS, Physics, Joshua D. Greene Harvard University, Professor of Psychology Robert Socolow Princeton University, Professor emeritus, Jianzhu Chen MIT, Professor of Biology, AAAS Fellow James E. Gunn Princeton University, Professor of Astrophysical Sciences (emeritus), American Medal of Science; Crafoord Prize, Swedish Academy of Science; Gruber Cosmology Prize; AAS Russell

David S Papermaster University of Connecticut Health Science

Hugh B. Haskell Retired, Instructor of Physics emeritus, North Carolina Lectureship; Gold Medal, RAS; Petrie Prize, RASCanada Henk Mooiweer Rice University, Adjunct Professor Chemistry ulie Biteen University of Michigan, Assistant Professor of Chemistry

Applied Physics Maria Procopio Johns Hopkins University, Professor of Biophysics Ole R. Holsti Duke University, George V. Allen Professor of International Affairs, emeritus, Duke University, President, Eric Kandel Columbia University, University Professor, 2000 Nobel Ahmed F Ghoniem MIT, Professor of Mechanical Engineering, APS International Studies Assolution Andrei Linde Stanford University, Professor of Physics, Kavli Prize Oceanography Sabine Kastner Princeton University, Professor of Neuroscience & Paul Sajda Columbia University, Professor of Biomedical ce Wiliam Deacon University of California, Berkeley,

or of Mathematics, Northwestern University, Bergman Prize am Deen MIT, Professor of Chemical Engineering oris I. Shraiman KITP, UCSB, Gurley Professor of Theoretical Physics and Biology, NAS Member, Member, NAS a Luft UCLA, Assistant Professor of Socio sor of Earth and Planetary Science s Koch Northwestern University, Professor of Physics othan N. Manoharan Harvard University, Professor of Chemical Engineering and Professor of Physics Rocco A. Servedio Columbia University, Professor of Computer Edwin Iversen Duke University, Associate Research, Professor of J. Shatz Stanford University, Professor of Biology and robiology, Member, National Academy of Sciences and 2016 Kavli iam F. van Altena Yale University, Profesor of Astronomy, Emeritus, oto and prehistoric sciences. Golden Trowel Award, UCLA Marc F Muller University of Notre Dame, Assistant Professor of Water Steven Davis American Museum of Natural History, Entomologis George E. Valley Prize of American Physical Society Bell University of Michigan, Professor of Astronomy, Director of

anice R. Naegele Wesleyan University, Professor of Biology,

John S. Wettlaufer Yale University, A.M. Bateman Professor of

E Strassmann Washington University in St. Louis, Professor

klin Stahl University of Oregon, Professor Emeritus of Biolo

National Academy of Science, Member European Molecular Biolog

Daykd Vanderbilt Department of Physics and Astronomy, Rutgers

versity, Board of Governors Professor of Physics

Geophysics, Mathematics and Physics, Member, Royal Swedish

Academy of Sciences; Fellow, American Physical Society

errone VoiceCo, LLC, Chief Product Officer

Milan Curcic University of Miami, Postdoctoral Assoc

on Chaw, Computer Science Researche

Michael E. Stewart, Chairman/CEO at Lucid.

Scientist, Florida Inventors Hall of Fame

y Pratt Institute for Human and Machine Cognition, Robotics Res

w Hurley Indiana University Bloomington, Theoretical Cogn

Pomerleau Carnegie Mellon University, Senior Research Scienti

Mark D. Melen MILSTAR, MITRE (1983-1995), Systems Analysis at

Pedersen Nissan (formerly Carnegie Mellon University), Prin

com and Machine Learning PhD Candidate, DePaul University

an Hasnow California State University Channel Islands, Lecture

n Bryant Heirich Independent, Computer scientist, Graduate fel

ים' Vieira Purdue University, Postdoctoral Researcher - Computi.

A. Farber Carengie Institution for Science, Principal Investigation

tin E. Lane University of Oxford, Center for Mind and Cultu

Bikram Bhatia MIT, Postdoctoral researcher, Mechanical Engineering

er Jacobs Lawrence Berkeley National Laboratory, Senior Scienti

Karl lagnemma Massachusetts Institute of Technology, Principal Resea

Javier Garcia Caltech & Dr. Karl Remeis Observatory, Postdoctor

holar/Senior Humboldt Fellow, Humboldt Senior Fellow

uhammad Ali Al-Radhawi Massachusetts Instiute of Techno

LEVYNA, Postdoctoral researcher, Executive Member, Internation

nnis L. Foster Mundus Institute, Director

Association for Cognitive Science of Religion

Research Associate, Dept of Mech. Eng.

Filip Mundt, Postdoctoral fellow

Neuroscience, Member, Connecticut Academy of Sciences and

Yann le Polain de Waroux Stanford University, Postdoctoral Scholar Gordon John Stacey Cornell University, Professor of Astronomy Douglas McKee Cornell University, Senior Lecturer, Economics ert Foster Davis Faculty member, Professor of Materials Science ilos Zefran University of Illinois at Chicago, Professor of Electrical Stephen Richard Lamont-Doherty Earth Observatory, Columbia abriel Chiodo Columbia University, Postdoc in Climate Science Robert Michael Moss U.S. Army NVESD, Principal Scientist Silvina Pagola College of William and Mary, Research Scientist, Americ vior, Cooper Award (Ornithology); Alden Miller Award (Ornitholo Chiang C. Mei Mass. Inst. Tech, Professor Emeritus of Civil and Kalyan Gupta Knexus Research Corp., President amal K. Seth Northwestern University, Evanston, IL, Professor of Daniel Cochran, Software Engineer and Grad Studer udies and Political Science, Glenda Dickerson Collegiate Professor Gary Flake, Scientist, Author, Inventor, World Technology Awa iel A. Steck University of Oregon, Associate Professor of Physics Ronald L. Rivest MIT EECS, Institute Professor, Member National Tyler Neely unaffiliated, Distributed systems reliability consultant esley L. Harris MIT, Professor of Aeronautics and Astronautics Wesley L. Harris, NAE MIT, Professor of Aeronautics and Astronautics Premila Samuel Rice University, Biochemistry grad student

Meia Chita-Tegmark Boston University, Psychology graduate student garet K. Thayer Field Museum of Natural History, Curator Em in Boynton, Earth Science Grad Student h Chau Ngoc Ho University of Michigan, Ecology grad stuksandr Sinetar, Technology Audit, American Society o d Hynes Koch Institute, MIT, Professor of Biolo robiology, NIH New Innovator; Pew Biomedical Scholar

hn Peck Philemon Foundatiion editor-translator, Editor, transla psychologist, Guggenhem Fellowhip, American in Rome Prix de Ron Bill Leikam Urban Wildlife Research Project, US Delegate to the People

ing-Hou Kim University of California, Berkeley, Professor o

Jean-Claude Latombe Stanford University, Professor Emeritus of ck Schaeffer Carnegie Mellon University, Professor of Mathematical

Nicholas Haan Singularity University, Vice President, NASA Vilson University of Michigan, Professor of Epidemiology

Bertram Raphael, Ph.D.-Math formerly SRI International, Hewlett

To see the full list of signatories as it grows, or to sign the letter

Volker Schweikhard Rice University, Research Assistant Professor, Degefu, Bekure Woldesemait Addis Ababa University, permanent Judith Cohen California Institute of Technology, Kate van Nuys

Lukasz Kurgan Virginia Commonwealth University, Professor of Catherine Badgley University of Michigan, Associate Professor of Ivana Hughes Columbia University, Senior Lecturer in Chemistry, Director of Frontiers of Science, K1 Project Faculty Affiliate Alejandro de Castro Mazarro Columbia University, Adjunct Professor Rachel Slaybaugh UC Berkeley, Professor of Nuclear Engineering, Barbara Bryant, computational biologist, Senior Director, Constelosh Dillon UC Berkeley, NSF Postdoctoral Fellow Malte Göttsche Princeton University, Physics post-doc