# Data 2025 V2.0
## 23 November 2020

## Conference Speakers

**Virtual event**

**For registration: Click here https://bit.ly/3ekiU0t**

# Opening Session

## Welcome

### Welcome remarks

**Marie-Laure SALLES**, Director, Graduate Institute, Geneva

Marie-Laure Salles became Director of the Graduate Institute of International and Development Studies in September 2020. Before joining the Institute, she was Dean of the School of Management and Innovation at Sciences Po Paris, a school she launched in 2016. Before that, she was Professor at ESSEC Business School, where she was also, in turn, Dean of the Faculty and Associate Dean for the PhD Programme.

With a PhD in Sociology from Harvard University and a *habilitation à diriger les recherches* from Dauphine University in Paris, Marie-Laure Salles was, until her arrival in Geneva, Professor at the Centre de sociologie des organisations (CSO) at Sciences Po Paris. Her research interests range from the role of social networks in the transnational diffusion of rules, practices and ideas, to the historical transformation of capitalism and national institutions, with a particular interest for the evolving nature of the social responsibility of firms and the transnational dynamics of economic governance in the context of globalisation. She has published broadly on those issues in top academic journals and books, and has received several awards, including the prestigious Max Weber Award for Distinguished Scholarship from the American Sociological Association in 2000.

Marie-Laure Salles has been a visiting professor in prestigious academic institutions in the United States and Europe. She holds a PhD *honoris causa* from Stockholm University and was made a Knight in the Legion of Honour by the French Government in 2017.

### Introduction

**Richard BALDWIN**, Professor of International Economics, Graduate Institute, Geneva

Richard Baldwin is Professor of International Economics at the Graduate Institute (Geneva), Ex-President of the Centre for Economic Policy Research (London), and Founder of VoxEU.org. In addition to his research and teaching, he advises governments and international organizations around the world on globalization and trade policy issues. In 1990-91 he served as a Senior Staff Economist for President George Bush's Council of Economic Advisors, having completed his PhD in economics at MIT with Paul Krugman (with whom he has published a half dozen articles). His book, *The Great Convergence: Information technology and the New Globalization*, published in November 2016 was cited by Lawrence Summers as one of the 5 most important books on globalization ever. His latest book *The Globotics Upheaval: Globalization, Robotics, and the Future of Work*, was published in February 2019.

**Keynote speaker**

**Martin VETTERLI**, President, EPFL

Prof. Martin Vetterli received a Dipl. Ing degree from ETHZ in 1981, an MS from Stanford in 1982, and a Doctorate from EPFL in 1986. He has held faculty positions at Columbia University, UC Berkeley and EPFL where he is a Professor since 1995. At EPFL, he was Vice President from 2004 to 2011, and served as Dean of the School of Computer and Communication Sciences in 2011 and 2012. From 2013 to 2016, he was President of the National Research Council of the Swiss National Science Foundation.

Researcher, teacher and expert on the Swiss education and research landscape, Martin Vetterli was appointed president of the Swiss Federal Institute of Technology Lausanne (EPFL) in 2017. In his role of full professor at the audiovisual communications laboratory at EPFL, Martin Vetterli's research activity focuses on electrical engineering, computer science and applied mathematics. Wavelet theory, image and video compression and self-organized communication systems are some of his favourite fields. His work has earned him numerous national and international awards, including the National Latsis Prize, in 1996. Martin Vetterli has published more than 170 journal articles and is co-author of three reference works. He is also the author of some five patents which have led to the creation of several startups from his laboratory, such as Dartfish or Illusonic, and to technology transfers through patent sales (Qualcomm).

Moderator: **Michael KENDE**, Visiting Professor, Graduate Institute, Geneva

Michael Kende is a Visiting Professor at the Graduate Institute and Senior Fellow of the Centre for Trade and Economic Integration, and a Senior Advisor at Analysys Mason. Most recently, he was the Chief Economist of the Internet Society. Prior to joining the Internet Society in August 2013, Michael Kende was a partner at Analysys Mason, a global consulting firm focused on telecommunications and media. He has done a significant amount of work on promoting Internet development in emerging regions around the world. He has also worked on the economics of cybersecurity, as a means to reduce data breaches and increase trust in the Internet. He has a Ph.D. in economics from MIT and a BA in mathematics and economics from Bowdoin College

## Session 1. What is data?

### Internet governance

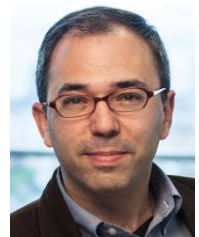**Dr. Katharina E. Höne**, Director of Research at DiploFoundation

Dr Katharina Höne is the Director of Research at the DiploFoundation (diplomacy.edu). In her role, she focuses on best practices and lessons learned from online and blended learning programmes. She also coordinates and teaches courses on diplomatic theory and practice, multilateral diplomacy, development diplomacy, and education diplomacy. In 2014-2016 she consulted with the Association of Childhood Education International (Washington, DC) on global education governance and education diplomacy. She completed her doctorate in international relations at the Department of International Politics, Aberystwyth University, UK, and obtained a Master in Diplomatic Studies from the University of Leicester, UK. Her research interests include online learning, multilateral diplomacy, non-state actors in diplomacy, and education diplomacy.

### Big Data

**Kenneth CUKIER,** Senior Editor at The Economist and fellow at Oxford University Said Business School

Kenneth Cukier is a senior editor at The Economist and host of its weekly tech podcast, Babbage. He is the coauthor of the New York Times bestselling book "Big Data" with Viktor Mayer-Schönberger, translated in over 20 languages. Kenn is a board director of Chatham House, and an associate fellow at the University of Oxford's Saïd Business School. He is a member of the Council on Foreign Relations. His upcoming book (with Mayer-Schönberger and Francis de Véricourt) is "Framers: Human Advantage in an Age of Technology and Turmoil."

### Machine learning

**Robert WEST**, Professor, Data Science Laboratory, EPFL

Robert West is a tenure-track assistant professor of computer science at EPFL (the Swiss Federal Institute of Technology, Lausanne), where he heads the Data Science Lab. He received his PhD in Computer Science from Stanford University, his MSc from McGill University, Canada, and his undergraduate degree from Technische Universität München, Germany. His research aims to understand, predict, and enhance human behavior in social and information networks by developing techniques in computational social science, social network analysis, machine learning, and natural language processing. Bob also collaborates closely with the Wikimedia Foundation, in his role as a Wikimedia Research Fellow. He is a co-founder of the Wiki Workshop and the Applied Machine Learning Days.

**Moderator: Jovan KURBALIJA**, Head of the Geneva Internet Platform

Jovan Kurbalija is the Founding Director of DiploFoundation and the Head of the Geneva Internet Platform. A former diplomat, Prof. Kurbalija has a professional and academic background in international law, diplomacy, and information technology. He has been a pioneer in the field of cyber diplomacy since 1992 when he established the Unit for Information Technology and Diplomacy at the Mediterranean Academy of Diplomatic Studies in Malta. Kurbalija was a member of the United Nations (UN) Working Group on Internet Governance (2004-2005), special advisor to the Chairman of the UN Internet Governance Forum (2006-2010) and a member of the High Level Multistakeholder Committee for NETmunidal (2013-2014). In 2018-2019, he served as co-Executive Director of the Secretariat of the United Nations (UN) High-level Panel on Digital Cooperation. Since 1997 Kurbalija's research and articles on cyber diplomacy have shaped research and policy discussion on the impact of the Internet on diplomacy and international relations. His book, An Introduction to Internet Governance, has been translated into 9 languages and is used as a textbook for academic courses worldwide.

## Session 2. The use of Data for Healthcare and Pandemics

### Data in epidemiology

**Marcel SALATHÉ**, Associate Professor, EPFL

Marcel Salathé is Head of the Digital Epidemiology Lab and Associate Professor at the École Polytechnique Fédérale de Lausanne, a position he has held since 2015. Additionally, Salathé is Academic Director of the EPFL Extension School. He is a digital epidemiologist working at the interface of population biology, computational sciences, and the social sciences. Previously, Salathé was a Visiting Assistant Professor at Stanford University in the summer of 2014. Prior to that, he was an Assistant Professor of Biology and researcher in the Center for Infectious Disease Dynamics at Penn State University from 2010 to 2015. Salathé has also co-founded AIcrowd, an AI evaluation startup, and is the founder and co-organizer of the Applied Machine Learning Days. He holds a Ph.D. in Biology and Environmental Science from ETH Zurich.

### Data for contact tracing

**Carmela TRONCOSO**, Professor, Security and Privacy Engineering Laboratory, EPFL

Carmela Troncoso is an Assistant Professor at EPFL (Switzerland) where she heads the SPRING Lab. She holds a Master's degree in Telecommunication Engineering from the University of Vigo (2006) and a Ph.D. in Engineering from the KU Leuven (2011). Before arriving to EPFL she was a Faculty member at the IMDEA Software Institute (Spain) for 2 years; the Security and Privacy Technical Lead at Gradiant working closely with industry to deliver secure and privacy friendly solutions to the market for 4 years.

Carmela's research focuses on security and privacy. Her thesis "Design and Analysis methods for Privacy Technologies" received the European Research Consortium for Informatics and Mathematics Security and Trust Management Best Ph.D. Thesis Award; and her work on Privacy Engineering received the CNIL-INRIA Privacy Protection Award 2017. During 2020 she lead the DP3T effort working on privacy-preserving solutions to support strategies to mitigate the COVID19 pandemic spread.

**Data protection in personalized health**

**Jean-Pierre HUBAUX**, Professor, Laboratory for Data Security and Academic Director of C4DT, EPFL

Jean-Pierre Hubaux is a full professor at EPFL and head of the Laboratory for Data Security. Through his research, he contributes to laying the foundations and developing the tools for protecting privacy in today's hyper-connected world. He has pioneered the areas of privacy and security in mobile/wireless networks and in personalized health. He is the academic director of the Center for Digital Trust (C4DT). He leads the Data Protection in Personalized Health (DPPH) project funded by the ETH Council and is a co-chair of the Data Security Work Stream of the Global Alliance for Genomics and Health (GA4GH). From 2008 to 2019 he was one of the seven commissioners of the Swiss FCC. He is a Fellow of both IEEE (2008) and ACM (2010). Recent awards: two of his papers obtained distinctions at the IEEE Symposium on Security and Privacy in 2015 and 2018. He is among the most cited researchers in privacy protection and in information security.

*Moderator*: **Olivier Crochat**, Executive Director, Centre for Digital Trust, EPFL

Dr. Crochat is the first Executive Director of C4DT. Olivier has a strong scientific background (Master Degree and PhD from EPFL in Telecommunication). He started his 20+ years career by setting up processes and managing a very large mobile telephony rollout project for Nokia, and then had executive roles in startups, SMEs and large companies. Before joining C4DT, Olivier was the CEO of a telecom company in Switzerland, that he successfully sold to a large European bandwidth infrastructure company. Olivier has an excellent understanding of the ICT domain, where he managed several projects (services, social applications, devices, mobile, networks, …) from idea to exit..

# Session 3. Principles of Data Governance

## Ethical data handling

**Robin WILTON**, Senior Advisor for Internet Trust, Internet Society

Robin Wilton is the Internet Society's Senior Advisor for Internet Trust. He is a specialist in online privacy, security, and digital identity, with over 30 years' experience in systems engineering, consulting and industry analyst roles. Robin joined the Internet Society in 2012, and has represented it in the OECD's Internet Technical Advisory Committee, the Council of Europe's committee on privacy and data protection, and in numerous industry forums. He recently led a project to produce Personal Data Protection Guidelines for Africa in conjunction with the African Union Commission. Robin is also a board member of the Kantara Initiative, a technology incubator for federated identity and distributed trust. He has been an external reviewer on a number of EU Horizon2020 projects in the areas of healthcare data, authentication and authorization, and is currently an evaluator and mentor on several NGI-Trust projects. Recently, Robin's work has been on: trust, privacy and user agency in the Internet of Things; how to apply ethical data-handling principles to product development and the impact of quantum computing on encryption.His long-term interest is in how social constructs such as identity, privacy and trust are mediated through technology.

### Government

**Anna BUCHTA**, Head, Unit " Policy & Consultation", European Data Protection Supervisor
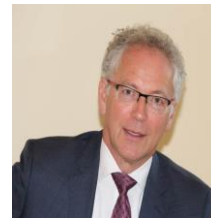
Anna Buchta is Head of the Policy & Consultation Unit at the European Data Protection Supervisor (EDPS) in Brussels. She coordinates the work of the EDPS on providing advice to the European Commission and other EU institutions and bodies on legislative and policy proposals relevant to data protection. She has extensive experience in data protection and privacy regulations, institutional law and litigation before the Court of Justice. She represented the EDPS in a number of cases before the CJEU, including Opinion 1/15 PNR Canada and, recently, a number of data retention cases. She is one of the institutional rapporteurs on EU data protection for the FIDE2020 Conference. Previously, Anna worked at the European Commission, among others on data privacy in electronic communications. Before that, she was a researcher at the Interdisciplinary Centre for Law and ICT (ICRI, currently CITIP) at KU Leuven (Belgium) and worked as a lawyer in private practice. Anna has a master's degree in Law from the University of Warsaw (Poland) and a Master of Laws (LL.M.) degree from the KU Leuven (Belgium).

### Developing corporate trust

**Jean-Yves ART**, Senior Director, Strategic Partnerships, Microsoft

Jean-Yves Art is Senior Director, Strategic Partnerships at Microsoft, based in Geneva. In that role, he manages the relationship between the Company and International Organizations on all policy themes of common interest to Microsoft and those organizations, such as sustainability, cybersecurity, responsible AI, digital safety, human rights, digital skills, connectivity, and internet governance. He regularly speaks on those topics in the EMEA region. Before joining Microsoft in 2002, Jean-Yves practiced European law with an international law firm in Paris and in Brussels and worked as a legal secretary at the Court of Justice of the European Communities. Until his move to Geneva in June 2016, Jean-Yves was a visiting professor at the College of Europe, Bruges; at Sciences Po Paris: and at the University of Liège. He has written extensively and is a regular speaker at conferences, formerly on EU law, now on international law topics.

Moderator: **Michael KENDE**, Visiting Professor, Graduate Institute, Geneva
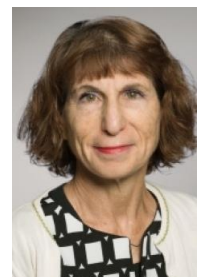
## Session 4. Future Practice of Data Governance

### How Nations Govern Data

**Susan Aaronson**, Research Professor of International Affairs, Director, Digital Trade and Data Governance Hub, George Washington University

Susan Ariel Aaronson is Research Professor of International Affairs and Director of the Digital Trade and Data Governance Hub. Aaronson conceived of and directs the Hub, which aims to educate policymakers, the press and the public about domestic and international data governance issues from digital trade to public data governance.
Aaronson is also a Cross-Disciplinary Fellow and affiliate at GWU's Institute for International Economic Policy, the Institute for Science and Technology Policy and the Sigur Center. She is also a Senior Fellow at the think tank Center for International Governance Innovation (GIGI) in Canada where she publishes much of her research
Aaronson is currently directing projects on mapping data governance; and writing on comparative advantage in data; trade as a tool to counter disinformation; data and national security, and America's approach to stimulating AI. Her research has been funded by the Hewlett, MacArthur, Koch, Ford, and Rockefeller Foundations; governments such as the Netherlands, U.S., and Canada; the UN, ILO, and World Bank, and U.S. corporations including Ford Motor and Levi Strauss.

## Data in insurance

**Jeff BOHN**, Director, Swiss Re Institute



Dr. Bohn is the Chief Research & Innovation Officer and Head of Research & Engagement at the Swiss Re Institute. Most recently, he served as Chief Science Officer and Head of GX Labs at State Street Global Exchange in San Francisco. Before moving back to California, he established the Portfolio Analytics and Valuation Department within State Street Global Markets Japan in Tokyo. Dr. Bohn often conducts seminars on topics ranging from credit instrument valuation & portfolio management to machine learning. He has published widely in the area of credit risk. He co-authored with Roger Stein Active Credit Portfolio Management in Practice (Wiley, 2009). His recent research focuses on socially responsible machine intelligence, causal inference to improve machine-learning interpretability, natural-language processing to improve risk modeling, and on a range of machine-intelligence-enabled tools to assess company & urban risk plus resilience in environmental, social, & governance areas.

## Security technology

**Olivier CROCHAT**, Executive Director, Centre for Digital Trust, EPFL (see Session 2)

## Trust, power and the broadening scope of data governance

**Rory Macmillan**, Partner, Macmillan Keck Attorneys & Solicitors, Geneva



Born and raised in Edinburgh, Scotland, Rory Macmillan is a founding partner of Macmillan Keck and a member of the New York Bar. Prior to Macmillan Keck, Rory practised law in New York and London for ten years with leading New York law firm Debevoise & Plimpton.

He has extensive experience advising policy makers, regulators, international institutions, service providers and investors on communications policy, law and regulation, and major corporate and financial transactions. He has chaired dispute processes, acted as arbitrator, mediator and independent expert in disputes of national importance, and trained officials from over 40 countries.

Moderator: **Jean-Pierre HUBAUX**, Professor, Laboratory for Data Security and Academic Director of C4DT, EPFL

# Closing Session

## Panel discussion

**Marietje SCHAAKE**, President, CyberPeace Institute

Marietje Schaake is the international policy director at Stanford University's Cyber Policy Center and international policy fellow at Stanford's Institute for Human-Centered Artificial Intelligence. She was named President of the Cyber Peace Institute.
Between 2009 and 2019, Marietje served as a Member of European Parliament for the Dutch liberal democratic party where she focused on trade, foreign affairs and technology policies. Marietje is affiliated with a number of non-profits including the European Council on Foreign Relations and the Observer Research Foundation in India and writes a monthly column for the Financial Times and a bi-monthly column for the Dutch NRC newspaper.

**Daria ROBINSON,** Executive Director, Geneva Science & Diplomacy Anticipator
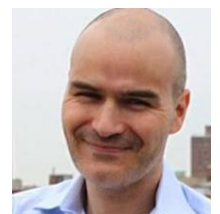
Daria Robinson studied Astrophysics at the University of Geneva and started her career with the European Space Agency, putting in place the external relations department at the beginnings of collaboration with Russia and the US. Convinced that the development of global science and technology initiatives can only be achieved through the active engagement of all actors of society, Daria ran until 2015 consulting businesses in the US and Switzerland where she developed new opportunities for governments, international organizations, and business. With this experience in hand and with the Paris Climate Conference taking shape, Daria turned her focus on sustainable development, working closely with business, NGOs and governments to build transformative solutions toward the 2030 Agenda. In 2018, Daria managed the leadership transition of a Geneva-based NGO, bringing safe and affordable technologies to developing countries in the areas of health, agro-ecology, water & hygiene, energy and nutrition. She joined the newly created GESDA at the end of 2019.
Daria has been serving on Boards, where her broad experience brings a unique perspective. She is also a passionate space and science "interpreter", building awareness of their importance to society by sharing her professional and personal stories through public speaking.

**Emmanuel LETOUZÉ,** Director & Co-Founder, Data-Pop Alliance

Emmanuel Letouzé is the Director and co-Founder of Data-Pop Alliance, a coalition on Big Data and development co-created in 2013 by the Harvard Humanitarian Initiative, MIT Media Lab, Overseas Development Institute, joined in 2016 by the Flowminder Foundation as its 4th core member. He is a Visiting Scholar at MIT Media Lab, a Research Affiliate at HHI and a Research Associate at ODI. He is the author of UN Global Pulse's White Paper "Big Data for Development" (2012) and of the 2013 and 2014 OECD Fragiles States reports. His research and work focus on Big Data's application and implications for official statistics, poverty and inequality, conflict, crime, and fragility, climate change, vulnerability and resilience, and human rights, ethics, and politics. He worked as a Development Economist for UNDP in New York from 2006-09 on fiscal policy, post-conflict economic recovery and migration, and between 2000-04 in Hanoi, Vietnam, for the French Ministry of Finance as a technical assistant in public finance and official statistics. He holds a BA in Political Science and an MA in Economic Demography from Sciences Po Paris, an MA from Columbia University School of International and Public Affairs, where he was a Fulbright Fellow, and a PhD from the University of California, Berkeley. He also a political cartoonist for various publications and media as 'Manu'.

**Edouard BUGNION,** Professor and Vice President for Information Systems, EPFL

Edouard Bugnion joined EPFL in 2012, where his focus is on datacenter systems. His areas of interest include operating systems, datacenter infrastructure (systems and networking), and computer architecture. Before joining EPFL, Edouard spent 18 years in the US, where he studied at Stanford and co-founded two startups: VMware and Nuova Systems (acquired by Cisco).

Prof. Bugnion currently serves as EPFL's Vice President for Information Systems. He also serves on the National COVID-19 scientific task force of the Confederation.

- Moderator: **Richard Baldwin**, Professor of International Economics, Graduate Institute, Geneva (See Opening Session)
- Closing **: Michael KENDE,** Visiting Professor, Graduate Institute, Geneva (See Opening Session)

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