

Plenary Table

9-10 am CET	Implications of AI for Science: Friend or Foe?
	Supported by Springer Nature
Speakers	1. Alena Buyx, TUM School of Medicine and Health 2. Henning Schönenberger, Springer Nature
Moderator	Cat Allman, Digital Science

Artificial Intelligence (AI) has long proven valuable in research and science. Recent technological developments promise to dramatically increase scientific output and assist humanity in addressing important global concerns ranging from climate change to developing epidemics. Simultaneously, new AI technologies raise social, ethical, and legal concerns as they can be used to provide deceptive results. This Plenary Table aims to explore the conditions and guidelines under which AI systems can be used in the scientific environment.

10-11 am CET	Climate Action Future
	Supported by Frontiers
Speakers	1. Kamila Markram, Frontiers 2. Lars Peter Riishøjgaard, World Meteorological Organization 3. Johan Rockström, Potsdam Institute for Climate Impact Research 4. Massamba Thioye, UNFCCC Secretariat
Moderator	Vivienne Parry, science writer and broadcaster

With climate change being the most pressing challenge of our time, securing a sustainable future depends on aligning core human needs with sustainable climate solutions. Despite growing awareness and international commitments, progress in climate action has been inadequate and slow, not doing enough to mitigate the impacts of climate change nor to prevent future degradation. This plenary table will investigate the reasons behind the failure, emphasize the need to reinvigorate COP process with solution-driven methods in mind and explore the role of Open Science in accelerating solutions, mobilizing stakeholders, and triggering a Green Renaissance.

11 am - 12 pm	Altering Medicine by Cell and Gene Therapy
	Supported by Bayer & Berlin Institute of Health at Charité
Speakers	1. Maria Alfaiate, Bayer 2. Hildegard Büning, Medizinische Hochschule Hannover 3. Nebojsa Milovic, Volnay Therapeutics
Moderator	Johannes Fruehauf, LabCentral

The creation of innovative medicines using cells and genes as therapeutic agents greatly profits from the ongoing technological progress. Innovation happens across academia and industry and collaboration in manufacturing, clinical validation and market entry is crucial for the development of novel therapies that benefit healthcare. The experts of this Plenary Table will discuss the learnings from exemplary innovation hubs regarding key success factors of co-development and co-creation and how collaborations between academia, start-ups and industry can better serve patients' particular needs and advance societal and economic sustainability.

12-1 pm CET	How Generative AI Can Revolutionize Therapy Development
	Supported by Sartorius
Speakers	1. Mads Nørregaard-Madsen, Amgen Research Copenhagen 2. David Ruau, NVIDIA 3. Benoit Schillings, X 4. Johan Trygg, Sartorius
Moderator	Mariette DiChristina-Gerosa, Boston University

The rapid development of Generative Artificial Intelligence is facilitating groundbreaking applications across various industries. This Plenary Table will explore the transformative potential of Generative AI in advancing innovative therapies and realizing their great promises. The panelists will discuss the current breakthroughs and future trajectory as well as ethical considerations and challenges associated with AI-driven therapy development.

2-3 pm CET Driving the Solar Energy Transition: Building a more Resilient and Secure Energy Supply Chain

- Supported by Helmholtz-Zentrum Berlin
- Speakers 1. Walburga Hemetsberger, SolarPower Europe
 2. Seth Marder, University of Colorado Boulder, NREL
 3. Daniel Menzel, Meyer Burger
 4. Rutger Schlatmann, Helmholtz-Zentrum Berlin
- Moderator Jennifer Porto, NYU Berlin

The urgency to tackle the climate crisis and achieve sustainable growth is adding to the momentum of the global energy transformation. Solar Photovoltaics (PV) undoubtedly has the potential to overcome the energy trilemma of energy security, affordability, and sustainability. This panel discussion will explore how a diverse solar PV industry can effectively mitigate technology development risks and overcome potential barriers to its competitiveness in the future.

3-4 pm CET Transatlantic Science Bridge in Key Science and Technology Developments

- Supported by DESY & Carnegie Science
- Speakers 1. Asmeret Asefaw Berhe, U.S. Department of Energy
 2. Cornelia Denz, Physikalisch-Technische Bundesanstalt
 3. Young-Kee Kim, American Physical Society
 4. Arik Willner, DESY
- Moderator Eric Isaacs, Carnegie Science

Conditions to cooperate in the international science arena are becoming increasingly complex as scientific communities address urgent challenges while respecting technological sovereignty. The session will address the role of transatlantic cooperation on key science and technology developments. Panelists will discuss the challenges and opportunities of multilateral partnerships in various areas such as quantum computing and semiconductors and biopreparedness research.

4-5 pm CET Perspectives and Challenges in Quantum Computing

- Supported by Berlin Quantum Alliance, Hamburg Quantencomputing, Jülich Quantum Computing Alliance, Munich Quantum Valley, Quantum BW & Quantum Valley Lower Saxony
- Speakers 1. Juan Ignacio Cirac, Max-Planck-Institute for Quantum Optics
 2. Sabrina Maniscalco, Algorithmiq Ltd.
 3. Andreas Wallraff, ETH Zürich
 4. Horst Weiss, BASF
- Moderator Jan-Martin Wiarda, independent journalist, author and moderator

Quantum computing has emerged as a revolutionary technology that promises to transform various fields, from drug discovery to optimization problems and cryptography to artificial intelligence. However, many of these applications are still in the distant future. This table will bring together leading experts from research and industry who will discuss the current state of the art in quantum computing and give a realistic assessment of the emerging applications.

5-6 pm CET Precision Prevention in Health: The Power of Genomics

- Supported by Helmholtz Munich
- Speakers 1. Nicola Blackwood, Genomics England and House of Lords Science & Technology Select Committee
 2. Nancy Cox, Vanderbilt Genetics Institute
 3. David Crosby, Cancer Research UK
 4. Segun Fatumo, London School of Hygiene and Tropical Medicine
 5. Marc McCarthy, Genentech
- Moderator Eleftheria Zeggini, Helmholtz Munich

As we are living through the 4th industrial revolution, the congruence of technological advances in genomics and the digital revolution has the potential to transform healthcare. Genomics can benefit precision prevention and improve human health by building on discoveries in genetics research and applying them in a clinical setting. This panel discussion will explore the opportunities to couple genomics at scale with promising exciting technology developments to catalyse a change in addressing grand challenges in modern healthcare.

Round Table

9-10 am CET	Challenges and Best Practices of Ageing Societies Supported by Berlin University Alliance & University of Oxford
Speakers	1. Henry Marx, Berlin Senate 2. Melinda Mills, University of Oxford 3. Diana Rothe, +robot Romi, pi4 Robotics 4. Elke Schäffner, Charité – Universitätsmedizin Berlin
Moderator	Irene Tracey, University of Oxford

Population ageing is a global phenomenon that affects both developed and developing nations. Increased life expectancy and declining birth rates impact healthcare systems and economies with social isolation and loneliness becoming an ever-present issue. Can new technologies like robot Romi help resolve the issue? This panel talk will gather speakers from Berlin, Oxford and Singapore to spotlight potential solutions and transdisciplinary approaches in tackling the consequences of aging demographics with focus on transnational collaboration.

10-11 am CET	Unlocking the Mysteries of the Cell Supported by Chan Zuckerberg Initiative
Speaker	1. Lucy Collinson, The Francis Crick Institute 2. Stephen Quake, Chan Zuckerberg Initiative 3. Sarah Teichmann, Wellcome Sanger Institute
Moderator	Stephani Otte, Chan Zuckerberg Initiative

In this roundtable discussion a multidisciplinary group of experts will share their perspectives on how collaborations using state-of-the-art genomic, open science, and imaging technologies are providing new insights into human biology and how these fundamental discoveries will shape tomorrow's therapies.

11 am - 12 pm	Ocean Solutions for the Climate Crisis The event is co-hosted by GEOMAR & Extantia Capital
Speakers	1. Peter Schlosser, Arizona State University 2. Katja Matthes, GEOMAR Helmholtz Centre for Ocean Research Kiel 3. Torben Schreiter, Extantia Capital
Moderator	tbc

This panel discussion will focus on ocean-centred climate change mitigation and adaptation solutions. The potential of the ocean for accelerating decarbonisation merits prioritisation in the global climate-change discourse. The ocean presents substantial climate mitigation and carbon storage options to help limit global warming, while simultaneously introducing opportunities for economic gain. How can we enable technology leaps and foster innovation to unlock the ocean's potential to mitigate global warming? What are prerequisites, e.g. an increased international cooperation and political framework.

1-2 pm CET	Training Scientists for the Future - Is the PhD still up to Date? Supported by Elsevier
Speakers	1. Alice Aiken, Dalhousie University 2. Karsten Danielmaier, German Chemical Society 3. Nick Fowler, Elsevier 4. Zainab Kidwai, University of York
Moderator	Jan-Martin Wiarda, independent journalist, author and moderator

The PhD is the foundation of the academic enterprise, the first piece of original work done by a researcher. With the significant changes seen within science and the expectations broader society has of science, early career researchers have to be prepared to address grand societal challenges such as climate crisis and biodiversity loss, and deal with the new economic demands and technologies by industry. This Round Table will discuss if the way we conceive of PhD training is still up-to-date, and how the reform of assessment and evaluation could affect academic culture.

2-3 pm CET	Planetary Boundary Science: Advancing Science to Save the Planet Supported by Frontiers Research Foundation
Speakers	1. Paul Behrens, Leiden University 2. Wendy Broadgate, Earth Commission 3. Maria Nilsson, Umeå University 4. Johan Rockström, Potsdam Institute for Climate Impact Research
Moderator	Jean-Claude Burgelman, Frontiers Planet Prize

Recent research has shown that the interdependence of Earth system stability and resilience, along with human well-being, is paramount for establishing safe and just Earth system boundaries. In this roundtable discussion, leading experts in planetary boundary science will explore innovative and interdisciplinary approaches needed to better understand and address the challenges facing our planet. The focus will be on the importance of a multi-stakeholder approach, combined with our scientific abilities, in protecting the Earth for future generations.

3-4 pm CET Six months after the elections - Turkey's role on the International Arena

Supported by Stiftung Mercator

Speakers

1. Asli Aksoy, CATS
2. Ayse Bingöl Demir, Turkey Human Rights Litigation Support Project
3. Galip Dalay, Chatham House
4. Fuat Keyman, Sabanci University

Moderator

Senem Aydin Düzgit, Sabanci University

The 2023 parliamentary and presidential elections in Turkey raised hopes for a new chapter in the country's foreign policy and international collaboration. After President Erdogan's approval of Sweden's NATO accession, analysts even spoke of a new start for the frozen Turkish-European relations. But how sustainable is this rapprochement? This roundtable discusses the political developments in Turkey after the elections and their implications for Turkey's role in the world and Turkish-European relations.

4-5 pm CET Unleashing the Potential of AI in Education: Shaping Tomorrow's Learning

Supported by Vodafone Stiftung Deutschland & Weizenbaum Institute

Speakers

1. Diana Knodel, Fobizz / 101sills
2. Katharina Scheiter, University of Potsdam
3. Gergana Vladova, Weizenbaum Institute / University of Potsdam

Moderator

Matthias von Kielmansegg, Vodafone Stiftung Deutschland

Artificial Intelligence is rapidly permeating education, with intelligent tutorial systems and chatbots influencing the way we learn and process knowledge. While navigating the new technologies, we have to comprehend the implications AI will have on the future of work and the educational system. This table will address the possible impact of data-driven and algorithm-based knowledge, evaluation, and application and discuss how we can equip the next generation to manage the opportunities and threats of AI use.

5-6 pm CET Integrating Ethics and Public Engagement into Scientific Discovery

Supported by Kavli Foundation

Speakers

1. Lomax Boyd, Berman Institute of Bioethics
2. Jodi Halpern, University of California, Berkeley
3. Anna Middleton, Cambridge University

Moderator

Vivienne Parry, science writer and broadcaster

As the pace of scientific discovery accelerates, new breakthroughs are quickly expanding our understanding of ourselves and the universe. As we seek groundbreaking science to benefit humanity while minimizing risks, the need for collaborations among scientists making discoveries, ethicists, social scientists, and public engagement professionals is increasingly important. Yet, these collaborations are rare. This session will feature perspectives from ground breakthrough science, ethics, and public engagement experts. Participants will discuss how to break the walls of academic silos and barriers between science and publics affected by scientific advances, in order to discuss the opportunities and challenges to engage the public proactively and intentionally in ethical considerations born from scientific discover.

- 9 am - 6 pm CET** **Else Kröner Fresenius Symposium for Breakthroughs in Life Sciences**
Supported by Else Kröner-Fresenius-Stiftung
- Speakers
1. Akiko Iwasaki, Yale University School of Medicine
 2. Claudia Höbartner, University of Würzburg
 3. Chuan He, University of Chicago
 4. Karen Christman, University of California San Diego
 5. Marc Dewey, Charité – Universitätsmedizin Berlin
 6. Peter Crompton, National Institutes of Health
 7. Pieter Roelfsema, Netherlands Institute for Neuroscience
 8. Tobias Erb, Max Planck Institute for Terrestrial Microbiology
- 9 am - 6 pm CET** **Volkswagen Foundation Symposium for Breakthroughs in Social Sciences and Humanities**
Supported by Volkswagen Foundation
- Speakers
1. Arline Geronimus, University of Michigan
 2. Beatriz Magaloni, University of Stanford
 3. Ilona Otto, University of Graz
 4. Jonathan Birch, London School of Economics and Political Science
 5. Laura Martin, Williams College
 6. Matthias Braun, University of Bonn
 7. Paul Behrens, Leiden University
 8. Pumla Gqola, Nelson Mandela University
- 9 am - 1 pm CET** **Wilhelm and Else Heraeus Symposium for Breakthroughs in Physical Sciences**
Supported by Wilhelm & Else Heraeus-Foundation
- Speakers
1. Libor Smejkal, Johannes Gutenberg University Mainz
 2. Keshav Dani, Okinawa Institute of Science and Technology, Graduate University
 3. Thomas Klinger, Max Planck Institute for Plasma Physics
 4. Vivek Polshettiwar, Tata Institute of Fundamental Research, Mumbai
 5. Valentina Emiliani, Vision Institute, CNRS
 6. Pablo Jarillo-Herrero, Massachusetts Institute of Technology
 7. Leo Gross, IBM Research Europe Zurich
 8. Arne Thomas, Technische Universität Berlin
- 2-6 pm CET** **SPRIND Sciencepreneurship Symposium**
Supported by Federal Agency for Disruptive Innovation SPRIND
- Speakers
1. Allison Duettmann, Foresight Institute
 2. Benoit Schillings, X, The Moonshot Factory
 3. Benjamin Reinhardt, Speculative Technologies
 4. Daria Isaksson, Vinnova
 5. Juliana Lim, SGInnovate
 6. Lisa Ericsson, KTH Innovation
 7. Orla Browne, Dealroom.co
 8. Rafael Laguna de la Vera, SPRIND
 9. Thomas Hellmann, University of Oxford
 10. Tom Kalil, Schmidt Futures