

Scientific Symposium

The Freedom of Scientific Research in the Face of Political and Societal Demands

Morning Session



Sir Peter Knight is Senior Fellow in Residence at the Kavli Royal Society International Centre at Chicheley Hall and past-President of the Institute of Physics. Knight retired at the end of September 2010 as Deputy Rector (Research) at Imperial College where he was responsible for the College's research strategy and a member of the Imperial College Management Board and Council. He retains his Professorship of Quantum Optics at Imperial. His research centres on theoretical quantum optics, strong field physics and especially on quantum information science. He has a strong interest in fostering multidisciplinary research and set up the Grantham Institute for Climate Change and other centres at Imperial College London.

Peter Knight is a Past-President of the Optical Society of America. He is a Thomson-ISI "Highly Cited Author". He was knighted in the Queen's Birthday Honours List in 2005 for his work in optical physics. Knight was chair of the Defence Scientific Advisory Council at the UK Ministry of Defence until 2010 and a member of the Science and Technology Facilities Council until 2012. He continues to be involved in advising government on science issues. Knight was Chief Scientific Advisor at the UK National Physical Laboratory until the end of 2005 and currently chairs their Quantum Metrology Institute and is a Board member of the UK National Quantum Technology Initiative. He has won a number of prizes and awards including the Thomas Young Medal and Glazebrook Medal of the Institute of Physics, the Royal Medal of the Royal Society and the Ives Medal of the OSA, and Honorary Doctorates from a number of Universities including most recently Glasgow, Sussex, and Royal Holloway. He is currently a member of the Millennium Prize Jury at the TAF, Finland.

Julian Nida-Rümelin holds the Chair for Philosophy and Political Theory at the University of Munich, chairs the interdisciplinary *Munich Center for Ethics* (MKE) and is director of the executive program *Philosophy, Politics, and Economics* (PPE) at the University of Munich. He guides the panel *Finance and Ethics* of the German Association of Financial Analyst and Asset Managers (DVFA e.V.). He is honorary professor of Humboldt University in Berlin, full member of the Berlin-Brandenburg Academy of Sciences and Humanities and the European Academy of Art and Science.



He studied philosophy, physics, mathematics and political science and received his PhD in philosophy under the mentorship of the renowned philosopher of science Wolfgang Stegmüller. In 1989, he finished his habilitation. He was director of the Geschwister-Scholl-Institute for Political Science of the University of Munich from 2004-2007, since 2009 he has been dean and co-dean of the Faculty of Philosophy, Philosophy of Science and the Study of Religion.

Prof. Nida-Rümelin spent five years (1998-2002) in cultural politics, first as Head of the Municipal Department of Arts and Culture of the Bavarian state capital Munich and then as State Minister for Culture and the Media during Gerhard Schröder's first term.

He has written numerous books, which deal with topics from practical philosophy and political theory.



Irmgard Griss studied law in Graz (1966–1970) and was then employed at the University of Graz as an assistant. 1975 Griss graduated with an LL.M. in International Legal Studies from the Harvard Law School. From 1976 until 1979 Griss worked as a law clerk in a law firm in Vienna. 1979 Griss started to work as a judge. 1993 she was appointed a judge at the Austrian Supreme Court. In the period from 2007 Griss was the President of the Supreme Court. 2008 she was appointed a deputy member of the Austrian Constitutional Court. 2010 Griss was elected President of the Network of Presidents of the Supreme Judicial Courts of the European Union. Currently Griss is an Honorary Professor for Civil and Commercial Law at the University of Graz, an International Judge at the Singapore International Commercial Court, and the Speaker of the Senate of the European Law Institute.

Michèle Leduc is a physicist in Laboratoire Kastler-Brossel at Ecole Normale Supérieure in Paris, now Research Director emeritus at CNRS. She first worked on quantum properties of gases at low temperature. She developed optical pumping of helium and new infrared lasers, which she also applied to lung imaging with hyperpolarized gases as well as to polarized targets for neutron reactors. In the 90s she joined the cold atom group lead by Claude Cohen Tannoudji and worked with him on Bose Einstein condensation. All along her career she occupied several offices in research management. She was president of the French Physical Society for 3 years (2007-2010). For the last 10 years she has been the director of IFRAF (Institute for Cold Atoms in the Paris area). She is now president of the Ethical Committee of CNRS.



Afternoon Session



Jean-Pierre Bourguignon was the Director of the Institut des Hautes Études Scientifiques (IHÉS) from 1994 till 2013. This international research institute located near Paris, France, was built as the European counterpart of the Institute for Advanced Study in Princeton. He was also the first ERC Panel Chair in Mathematics, for Starting Grants.

A mathematician by training, he spent his whole career as a fellow of the Centre National de la Recherche Scientifique (CNRS). He held a Professor position at École polytechnique from 1986 to 2012. From 1990 to 1992, he was President of the Société Mathématique de France and President of the European Mathematical Society from 1995 to 1998. He is a former member of the Board of the EuroScience organisation (2002-2006) and served on EuroScience Open Forum (ESOF) committees since 2004.

Professor Bourguignon received the Prix Paul Langevin in 1987 and the Prix du Rayonnement Français in Mathematical Sciences and Physics from the Académie des Sciences de Paris in 1997. He is a foreign member of the Royal Spanish Academy of Sciences. In 2005, he was elected honorary member of the London Mathematical Society and has been the secretary of the mathematics section of the Academia Europaea. In 2008, he was made Doctor Honoris Causa of Keio University, Japan, and, in 2011, Doctor Honoris Causa of Nankai University, China.

In addition to his mother tongue, French, Professor Bourguignon is fluent in English and German.

László Lovász (born in 1948) is a Hungarian mathematician, best known for his work in combinatorics, graph theory and theoretical computer science. Currently he is the President of the Hungarian Academy of Sciences.

His mathematical gift was acknowledged at an early age, and earned him gold medals in the International Mathematical Olympiad for three consecutive years (1964, 1965, 1966). He was awarded the Wolf Prize in 1999, and the Kyoto Prize in 2010. Lovász was a professor at Yale University during the 1990s and was a collaborative member of the Microsoft Research Center until 2006. He returned to Eötvös Loránd University, Budapest, where he was director of the Mathematical Institute (2006–2011).



Lovász was awarded the Brouwer Medal (1993), the Knuth Prize (1999), the Bolyai Prize (2007), and Hungary's Széchenyi Grand Prize (2008). He received the Advanced Grant of the European Research Council (2008). He was president of the International Mathematical Union between 2007 and 2010.

He is member of the National Academy of Sciences (US), foreign member of the Royal Netherlands Academy of Arts and Sciences (2006) and Royal Swedish Academy of Sciences (2007), honorary member of the London Mathematical Society (2009), fellow of the American Mathematical Society (2012). Lovász is listed as an ISI highly cited researcher.



Stefan Hornbostel was born in 1955 in Hannover, Germany. He graduated in Social Sciences in 1982 and received his Ph.D. from Freie Universität Berlin in 1995. He started his career at the Research Centre for Occupational and Higher Education Research, now called International Centre for Higher Education Research (INCHER). He worked at the Universities of Cologne and Jena, where, at the latter, he assisted in the formation of the Department of Sociology. He was a scientific referee at the Centre of Higher Education Development (CHE) before he was appointed to a professorship at the Institute for Sociology at the University of Dortmund. Since 2005, he is a Full Professor at the Department of Social Sciences at the Humboldt-Universität zu Berlin. From 2005 to 2015 he served as Director of the Institute for Research Information and Quality Assurance (iFQ) which provided information and analysis of developments and transformations in the German and international science system. He is currently Director of the Department Research System and Research Dynamics at the German Centre for Higher Education Research and Science Studies (DZHW).

His broad research interests comprise Bibliometrics, Sociology of Elites and Science Studies. Stefan Hornbostel has been responsible for several significant studies, among them the Competence Centre for Bibliometrics and the Research Core Dataset. He is member of the advisory boards of the Alexander von Humboldt-Foundation, two sections of the German Council of Science and Humanities, Leibniz Institute for the Social Sciences (GESIS), and others.

Andre Gingrich is a socio-cultural anthropologist (doctoral degree 1979, *venia docendi* 1992) at UVienna, where he is Full Professor since 1997. He has carried out ethnographic fieldwork and archival studies in the Arab peninsula, with particular emphasis on the interplay between folk star lore, almanachs, and scholarly astronomy. Gingrich was a visiting scholar at SAR (Santa Fe, NM), at UChicago, and at UMass. He also has published on the history of anthropology (co-authoring "One Discipline, Four Ways" UChicago Press 2005, translated into Chinese, Spanish, and other languages) and on qualitative methodologies in the Humanities and Social Sciences. He has served in various international funding and research institutions, including as panel chair in the European Research Council (2008-2013) and the SAB of the Max Planck Institute for Social Anthropology (since 2013). Gingrich is a fellow at the World Academy for the Advancement of Sciences (TWAS), an international member of the Royal Swedish Academy of Sciences, and a Full Member of the Austrian Academy (ÖAW).



Johannes Jan Velterop (1949 – The Hague, The Netherlands), is a marine geophysicist who became a science publisher in the mid-1970s. He started his publishing career at Elsevier in Amsterdam. In 1990 he became director of a Dutch newspaper, but returned to international science publishing in 1993 at Academic Press in London, where he developed the first country-wide deal that gave electronic access to all AP journals to all institutes of higher education in the UK (later known as the BigDeal, although considerably altered in nature). He next joined Nature as director, but moved quickly on to help get open access publisher BioMed Central off the ground. He participated in the Budapest Open Access Initiative. In 2005 he joined Springer, based in the UK as Director of Open Access. In 2008 he left to help further develop semantic approaches to accelerate scientific discovery. He is an active advocate of BOAI-compliant open access (i.e. open access with re-use

rights) and of the use of microattribution, the hallmark of so-called “nanopublications”, which he hopes will enable researchers to deal with the scientific information overload. He published many articles and (guest) blog posts, and speaks regularly, on both topics as well as on peer review reform. Velterop serves on the advisory boards of several companies and initiatives active in open access publishing and open science in general.

Julia Budka is Professor for Egyptian Archaeology and Art History at the Ludwig-Maximilians-University Munich. She studied Egyptology and Classical Archaeology at the University of Vienna. Already prior to having been awarded with a PhD, she got a researcher position in Berlin (Humboldt University, 2004-2012). Her dissertation in Egyptology was completed in 2007. Budka was awarded with the START prize of the FWF and the ERC Starting Grant in 2012. Her START project is hosted by the Austrian Academy of Sciences; the ERC project AcrossBorders was transferred to the LMU in 2015 – both focus on settlement archaeology and material culture in Egypt and Sudan in the 2nd millennium BCE.



Budka has lectured primarily at Berlin (HU Berlin), at Leipzig and Vienna. Since 1997 she has been working on international archaeological excavations in Egypt and in Sudan. Her special fields of interest are pottery, settlement archaeology and the study of funerary remains and rituals.



Roberta D'Alessandro is professor at the Leiden University Centre for Linguistics and Chair of Italian language and culture at the same university, as well as former chair of the Linguistic Institute advisory board.

In 2015, she was awarded an ERC Consolidator Grant; she was also elected for an ICREA research professorship offered by the government of Catalonia (opted out). At Leiden, she has been PI and co-PI in several Dutch-based (NWO) and international projects. She is editor in chief of two book series (with Language Science Press and Brill), and in the board of GLOW, one of the most important European linguistics associations, as well as member of several scientific associations.

She is a member of the *Young Academy of the Royal Netherlands Academy of Arts and Science* (KNAW), where she was a board member in charge of the internationalization program until April 2015, and of the *Global Young Academy* (GYA), where she is a member of the Working Group "Science and Education for Youth".

She is a member of the *Committee for Freedom and Responsibility in the Conduct of Science* of the *International Council for Science* (ICSU), which she will be representing at the Expert Meeting of the UN-DESA, on April 4-6 in New York, where she will participate in the development of chapter 5 of the 2016 Global Sustainable Development Report (GSDR).

Before moving to Leiden, she worked as a research associate at the Laboratory for Language asymmetries at the University of Quebec in Montreal, Canada. Previously, she was a Marie Curie

Fellow at Cambridge University, UK, and before that a research assistant at Microsoft-Butler Hill in Seattle, USA. She is also a member of Academia.net, a network of young outstanding female scientists. In June 2014, she was distinguished as Knight of the Order of the Star of the Italian Republic for her contribution to the diffusion and protection of the minority languages of Italy.

Paul Heinz Mayrhofer is University Professor of Materials Science at the Institute of Materials Science and Technology, Technische Universitaet Wien, TU Wien, since 2012. Paul is also Guest Professor at the Central South University, Changsha, Hunan (China). He received a Ph.D. in 2001 and Habilitation in 2005 in Materials Science at the University of Leoben. Paul spent his post-doc and Erwin-Schrödinger-Fellowship at University of Illinois at Urbana-Champaign, RTWH Aachen, and Linkoping University. His research activities focus on the development and characterization of vapor phase deposited nanostructured materials by a combination of computational and experimental material science. He has pioneered age hardening within hard ceramic thin films based on ternary nitrides and borides and given more than 40 invited presentations (including plenary and key note lectures). Paul is member of the "Junge Kurie" of the Austrian Academy of Sciences, President of the Austrian Vacuum Society, and Editor for the Elsevier Journal Vacuum. At TU Wien he also is Dean of Academic Affairs at the Faculty Mechanical and Industrial Engineering and chairs the Master Study Program for Materials Science.

