



MAX-PLANCK-GESELLSCHAFT

# Symposium Frontiers of Science CONACYT – Max Planck Society



CONACYT  
Consejo Nacional de Ciencia y Tecnología

Tuesday, February 27

8:00-8:30

Registration

8:30-9:00

Inauguration

9:00-10:00

Astronomy / Astrophysics

[David Hughes](#) - National Institute of Astrophysics, Optics and Electronics (INAOE)

*"The Large Millimeter Telescope Alfonso Serrano: unveiling the obscured dusty universe"*

[Anton Zensus](#) - MPI for Radio Astronomy

*"Radio imaging of Active Galactic Nuclei with Extreme Angular Resolution"*

10:00-11:00

[Hubert Klahr](#) - MPI for Astronomy

*"Planet Formation at home at abroad: What made the Earth habitable?"*

[Frédéric Masset](#) - Institute of Physics – UNAM

*"Planet formation"*

11:00-11:30

Break

11:30-12:30

Material Research

[José Luis Rodríguez](#) - Institute for Scientific and Technological Research of San Luis Potosi (IPICYT).

*"Rational Design of Nanomaterials: Insights from the Exploration of the Potential Energy Surface"*

[Beatriz Roldán](#) - MPI Fritz Haber

*"New insights into the dynamic nature of nanocatalysts under reaction conditions"*

12:30-13:30

[Gabriel Luna](#) - Center for Research and Advanced Studies (CINVESTAV)

*"Deep Eutectic Solvents: a green platform for advanced materials synthesis"*

[Katharina Landfester](#) - MPI for Polymer Research

*"Nanocapsules for targeted drug delivery"*

13:30-14:30

Lunch

14:30-15:30

Neurosciences

[Peter Mombaerts](#) - MPI Research Unit for Neurogenetics

*"Targeting olfaction"*

[Xavier Soberón](#) - National Institute of Genomic Medicine (INMEGEN)

*"Toward genomics application in Mexican health: advances and perspectives"*

15:30-16:30

Biomedicine

[Luis Alonso Herrera](#) - National Institute of Cancer

*"TBC"*

[Thomas Meyer](#) - MPI for Infection Biology

*"The causality of chronic bacterial infections in human cancer"*

16:30-17:00

Break

17:00-18:00

Neurosciences

[Jason Kerr](#) - MPI Neuroscience

*"Quantification of head and eye movements in freely behaving mammals: seeing what they see"*

[Elder de la Rosa](#) - Research Center in Optics (CIO)

*"TBC"*

February 27 – March 1, Mexico City

Auditorio Jaime Torres Bodet - Museo Nacional de Antropología



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Wednesday, February 28

8:30-9:00

Registration

9:00-10:00

Neurosciences

[Walter Stühmer](#) - MPI for Experimental Medicine

*"A synthetic approach to neurobiology"*

[Oscar Arias Carrión](#) - Hospital General Dr. Manuel Gea González

*"TBC"*

10:00-11:00

Biomedicine

[Alejandro García Carrancá](#) - Institute of Biomedical Research - UNAM

*"Human papiloma virus, stem cells and cancer"*

[Stefan Offermans](#) - MPI for Heart and Lung Research

*"Microvascular functions in tumor cell metastasis"*

11:00-11:30

Break

11:30-12:30

Archaeology  
Archaeogenetics

[Johannes Krause](#) - MPI for the Science of Human History

*"Ancient Pathogen genomes from pre- and early colonial epidemics in Mexico and South America"*

[Arturo González](#) - Desert Museum

*"The challenges and future of archaeology and paleontology studies in México"*

[Rodrigo Barquera](#) - MPI for the Science of Human History

*"The immune challenges that shaped pre-Hispanic populations in the Americas"*

12:30-13:30

Social  
Sciences

[Olga Hansberg Torres](#) - Faculty of Philosophy and Literature - UNAM

*"Affectivity in personal relations"*

[Ute Frevert](#) - MPI for Human Development

*"Populism and the Power of Emotions in"*

13:30-14:30

Lunch

14:30-15:30

Social  
Sciences

[Axel Börsch-Supan](#) - MPI for Social Law and Social Policy

*"The economics of individual and population aging: lessons from international comparisons"*

[Rebecca Wong](#) - University of Texas

*"TBC"*

15:30-16:30

[Jorge Chabat](#) - Center for Research and Teaching of Economics (CIDE)

*"TBC"*

[Matias Dewey](#) - MPI for the Study of Societies

*"The informal pact: the political economy of law violation"*

16:30-17:00

Break

17:00-18:00

Chemical Ecology  
and Plant Sciences

[Bryson Voirin](#) - MPI for Ornithology

*"A global platform to track animals from space"*

[Raúl Jiménez Rosenberg](#) - Commission for the Knowledge and Use of Biodiversity (CONABIO)

*"Intelligence for decision making on the Natural Capital of Mexico"*

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CONACYT  
Consejo Nacional de Ciencia y Tecnología

Thursday, March 1

9:00–10:00

Chemical Ecology and Plant  
Sciences

[Alejandra Bravo](#) – Biotechnology Institute - UNAM

*“Crop protection from insect attack and evolution of resistance of insect to GMO crops”*

[David Heckel](#) - MPI for Chemical Ecology

*“ABC transporters play a central role in insect resistance to Bacillus thuringiensis toxins”*

10:00–11:00

[Wilhelm Boland](#) - MPI for Chemical Ecology

*“Factors controlling the composition of the microbiome of the agricultural pest Spodoptera littoralis”*

[Gabriela Olmedo Álvarez](#) - Center for Research and Advanced Studies (CINVESTAV)

*“Synthetic Ecology as a means to disentangle complex microbial interactions”*

11:00–11:30

Break

11:30–12:30

Computational  
Sciences

[Humberto Salazar Ibarguen](#) - Mexican Supercomputing Network

*“TBD”*

[Stefan Heinzl](#) - MPI Data y Computation Facility

*“Towards Exascale Computing - A Challenge for the Application Science Community”*

12:30–13:30

Closing Ceremony

February 27 – March 1, Mexico City

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