



INSTITUTO DE
ASTROFÍSICA DE
ANDALUCÍA

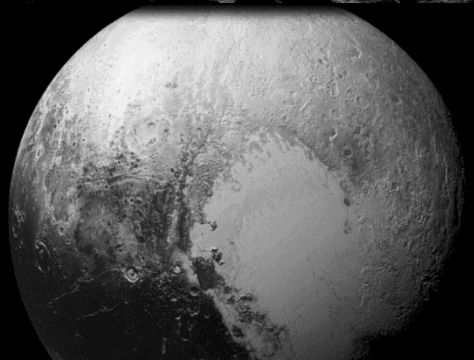
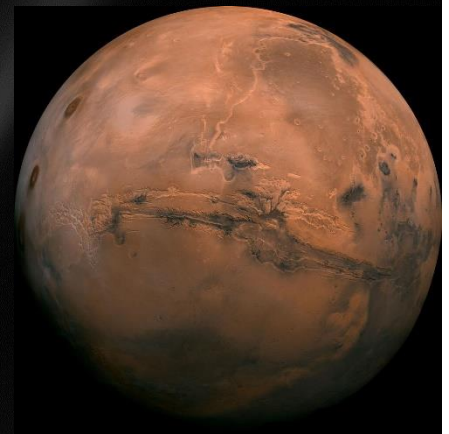
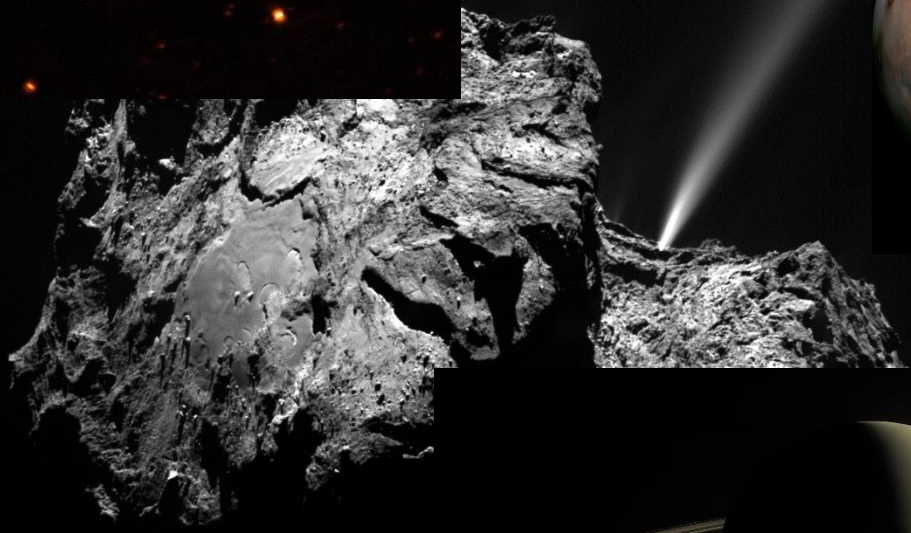
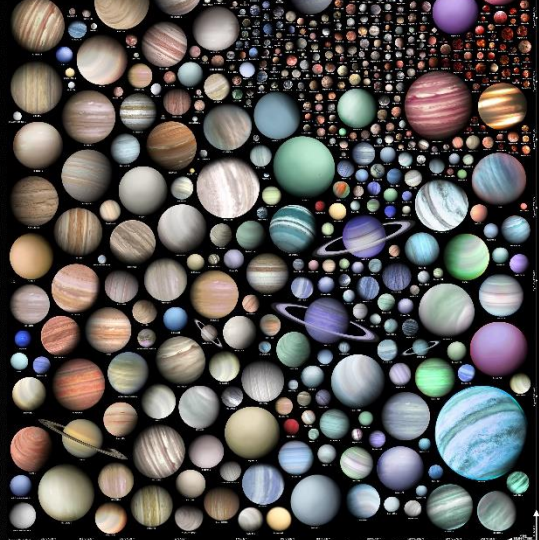
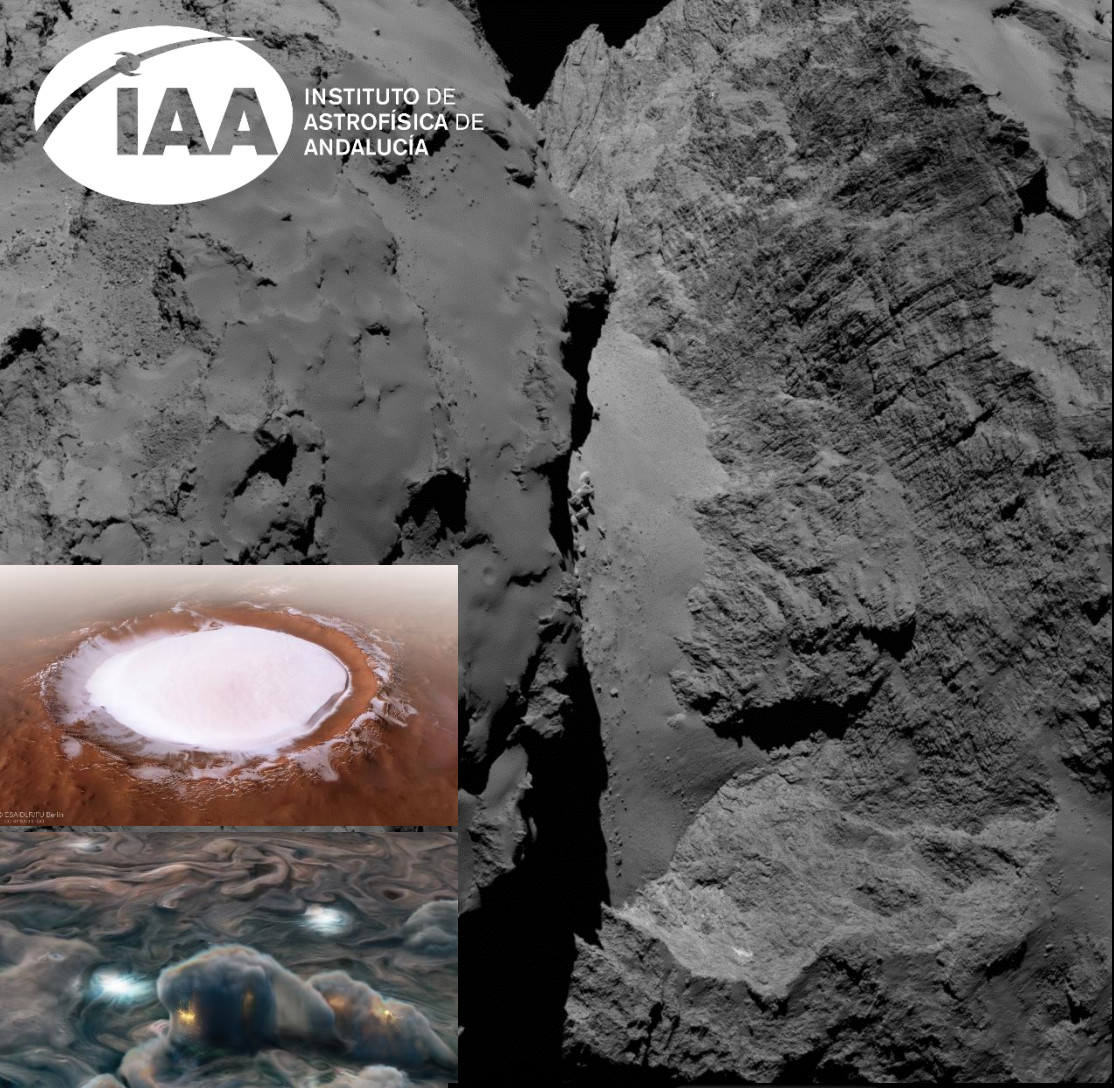


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Lecturers

Alessandro Morbidelli (Observatoire de la Cote d'Azur, Nice, France)

Yann Alibert (Center for Space and Habitability, University of Bern, Switzerland)

Diego Turrini (Istituto di Astrofisica e Planetologia Spaziali, Rome, Italy)

Zhaohuan Zhu (University of Nevada, USA).

Luis Zapata (Institute of Radio Astronomy and Astrophysics National Autonomous University of Mexico, Mexico)

Phil Judge (University Corporation for Atmospheric Research, USA)

Bárbara Rojas Ayala (Universidad de Tarapacá, Chile)

Ann Carine Vandaele (Planetary Aeronomy Division at Institut d'Aeronomie Spatiale de Belgique, Belgium)

Aymeric Spiga (Sorbonne Université, Faculté des Sciences and Laboratoire de Météorologie Dynamique, Paris, France)

Susan Conway (Université de Nantes, Nantes, France)

Mercedes López-Morales (Center for Astrophysics | Harvard & Smithsonian, Massachusetts, USA)

Sara Seager (Massachusetts Institute of Technology, Massachusetts, USA)

Lee Grenfell (German Aerospace Center and Technical University, Berlin, Germany)

Tristan Guillot (Observatoire de la Cote d'Azur, Nice, France)

Leigh Fletcher (University of Leicester, Leicester, United Kingdom)

Ricardo Hueso (Universidad del País Vasco, Bilbao, Spain)

Emmanuel Lellouch (LESIA, Observatoire de Paris-Meudon, France)

Kevin Heng (Center for Space and Habitability, University of Bern, Switzerland)

Hannah Wakeford (University of Bristol, Bristol, United Kingdom)

Jonathan Fortney (University of California, Santa Cruz, USA)

Luca Fossati (Space Research Institute, Austrian Academy of Sciences, Graz, Austria)

David Jewitt (University of California Los Angeles, USA)

Daniela Lazzaro (Observatorio Nacional, Rio de Janeiro, Brazil)

Karen Meech (Institute for Astrophysics, Hawaii University, USA)

Dominique Bockelée-Morvan (LESIA-Observatoire de Paris-Meudon, France)

Noemí Pinilla (Florida Space Institute, USA)

Amaya Moro Martín (Space Telescope Science Institute, Baltimore, Maryland, USA)

Sebastian Marino (University of Cambridge, Cambridge, United Kingdom)



Planets, exoplanets and their systems in a broad and multidisciplinary context



Origin and evolution of planetary systems

- “A brief outline of Solar System history” by Alessandro Morbidelli (Observatoire de la Cote d'Azur, Nice, France)
- “From disk to **planetary** systems: end-to-end models and population synthesis” by Yann Alibert (Center for Space and Habitability, University of Bern, Switzerland)
- “The compositional dimension of planet formation” by Diego Turrini (Istituto di Astrofisica e Planetologia Spaziali, Rome, Italy)
- “Planet formation: from protoplanetary disk observations to theories” by Zhaohuan Zhu (University of Nevada, USA).
- “Planet forming disks in the ALMA era” by Luis Zapata (Institute of Radio Astronomy and Astrophysics National Autonomous University of Mexico, Mexico)

The host star

- "The mercurial Sun at the heart of our solar system" by Phil Judge (University Corporation for Atmospheric Research, USA)
- “Twenty-five years of exoplanetary systems discoveries, what we have learned so far?” by Bárbara Rojas Ayala (Universidad de Tarapacá, Chile)

Planets, exoplanets and their systems in a broad and multidisciplinary context



Rocky planets

- “Telluric planets: comparative planetology” by Ann Carine Vandaele (Planetary Aeronomy Division at Institut d'Aeronomie Spatiale de Belgique, Belgium)
- “Atmospheres and climates of telluric planets of the solar system” by Aymeric Spiga (Sorbonne Université, Faculté des Sciences and Laboratoire de Météorologie Dynamique, Paris, France)
- “The history of water on Mars through its geomorphology - clues to the climate and evolution of Mars as a planet” by Susan Conway (Université de Nantes, Nantes, France)
- “What the observed mass-radius relation of small exoplanets is telling us about their interiors and atmospheres” by Mercedes López-Morales (Center for Astrophysics | Harvard & Smithsonian, Massachusetts, USA)
- “Planetary systems with rocky exoplanets and the search for exoplanet atmosphere biosignature gases” by Sara Seager (Massachusetts Institute of Technology, Massachusetts, USA)
- “Habitability and atmospheric biosignatures in an exoplanetary context” by Lee Grenfell (German Aerospace Center and Technical University, Berlin, Germany)

Planets, exoplanets and their systems in a broad and multidisciplinary context



Fluid and icy giants: the planet and its system

- “Unveiling Jupiter with Juno: Consequences for Giant Planets” by Tristan Guillot (Observatoire de la Cote d'Azur, Nice, France)
- “Exploration of the gas giants: Jupiter and Saturn” by Leigh Fletcher (University of Leicester, Leicester, UK)
- “The ice giants Uranus and Neptune: current data and future exploration” by Ricardo Hueso (Universidad del País Vasco, Bilbao, España)
- “Tenuous atmospheres of the Solar System” by Emmanuel Lellouch (LESIA, Observatoire de Paris-Meudon, France)
- “Exoplanets from super Earths to sub-Neptunes and gas giants: demographics, atmospheres” by Kevin Heng (Center for Space and Habitability, University of Bern, Switzerland)
- “The role of clouds in exoplanet atmospheres” by Hannah Wakeford (University of Bristol, Bristol, United Kingdom)
- “The atmospheres and structure of Hot Jupiters” by Jonathan Fortney (University of California, Santa Cruz, USA)
- “Theory and observational evidence of planet atmospheric escape” by Luca Fossati (Space Research Institute, Austrian Academy of Sciences, Graz, Austria)

Planets, exoplanets and their systems in a broad and multidisciplinary context



Small bodies and debris disks

- "Planetary astrophysics of small bodies" by David Jewitt (University of California Los Angeles, USA)
- "Physical properties of small bodies of the Solar System derived from remote observations and the problem of data x modelling." By Daniela Lazzaro (Observatorio Nacional, Rio de Janeiro, Brazil)
- "Using small solar system bodies (comets, asteroids) to help understand the formation of habitable worlds" by Karen Meech (Institute for Astrophysics, Hawaii University, USA)
- "Comets, clues to the early history of the Solar System" by Dominique Bockelée-Morvan (LESIA-Observatoire de Paris-Meudon, France)
- "Chasing ice in the Solar System" by Noemí Pinilla (Florida Space Institute, USA)
- "Interstellar planetesimals" by Amaya Moro Martín (Space Telescope Science Institute, Baltimore, Maryland, USA)
- "Planetesimal/debris discs" by Sebastian Marino (University of Cambridge, Cambridge, United Kingdom)

Organising Committee



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