

Invited Talks and Lectures

Fundamental Problems in Planetary Science and Astrobiology

13th IAU-Abdul Jabbar Astronomy Workshop
Bangladesh University of Engineering and Technology
Dhaka, Bangladesh (November 6, 2020)

Terrestrial Planet Formation in Modern Era: Current State and Future Direction

Pathways to Habitability
Bad Hofgastein, Austria (January 12-18, 2020)

Life Stories; A Career in Planetology

Keynote Presentation at EPSC-DPS 2019
Geneva, Switzerland (September 15, 2019)

Planets in Binary Stars

Institute of Physical Sciences of the National Autonomous University of Mexico (ICF-UNAM)
Cuernavaca, Mexico (February 20, 2019)

New Advances in the Formation of Terrestrial Planets

National Institute for Space Research
San Jose Campos, Brazil (October 2, 2018)

Four Lectures on Exoplanet Formation and Kepler Telescope's Discoveries

3rd Astrobiology School at the National Observatory of Brazil
Rio de Janeiro, Brazil (October 1 – 5, 2018)

Planet Formation: The Gateway to Astrobiology

Keynote talk at the 3rd AbGradE Symposium
Berlin, Germany (September 22 – 24, 2018)

From Dust to Planets

Summer School on the Formation and Evolution of Stars and Planets, the Early Solar System, and the Emergence of Life
Vienna, Austria (August 17 – 18, 2018)

Modern Simulations of Terrestrial Planet Formation and the Origin of Earth's Water

Leibniz Institute for Astrophysics
Potsdam, Germany (June 7, 2018)

Modern Simulations of Terrestrial Planet Formation and the Origin of Earth's Water

University of Groningen
Groningen, Netherlands (June 4, 2018)

Modern Simulations of Terrestrial Planet Formation and the Origin of Earth's Water

National Astronomical Observatory of Japan
Tokyo, Japan (May 18, 2018)

Modern Simulations of the Formation of Terrestrial Planets and Origin of Earth's Water
Yuval Ne'eman Distinguish Lectures in Geophysics, Atmospheric Physics and Space Science
University of Tel Aviv, Israel (April 16, 2018)

Kepler and the Discovery of Worlds with Multiple Suns
Yuval Ne'eman Distinguish Lectures in Geophysics, Atmospheric Physics and Space Science
University of Tel Aviv, Israel (April 15, 2018)

Kepler's Discovery of New Habitable Worlds
Hebrew University of Jerusalem
Jerusalem, Israel (April 12, 2018)

The Unifying Power of Astrobiology
Keynote talk at the Astrobiology Conference
Hebrew University of Jerusalem, Israel (April 10, 2018)

Kepler's Discovery of New Habitable Worlds
Yuval Ne'eman Distinguish Lectures in Geophysics, Atmospheric Physics and Space Science
University of Tel Aviv, Israel (April 9, 2018)

Kepler's Discovery of New Habitable Worlds
New York University in Abu Dhabi
Abu Dhabi, United Arab Emirates (February 21, 2018)

The Unifying Power of Astrobiology
Astrobiology Conference
Coyhaique, Chile (November 27 – Dec 1, 2017)

Formation and Evolution of Planetary Systems
Training School on Astrobiology
Santiago, Chile (November 24 – 25, 2017)

The Fall of the Nice Model
Institute for Astronomy, University of Hawaii-Manoa
Honolulu, HI (October 3, 2017)

Formation of Terrestrial Planet in the Solar System
The 9th Humboldt Colloquium on Celestial Mechanics
Bad Hofgastein, Austria (March 20 – 24, 2017)

The Unifying Power of Research on Life
Search for Life: From Early Earth to Exoplanets
Qui Nhon, Vietnam (December 11 – 16, 2016)

Formation of Solar System

Training School on Basic Astrobiology
Qui Nhon, Vietnam (December 9 – 11, 2016)

Kepler Habitable Zone Planets

Hawaii Institute for Geophysics and Planetology
Honolulu, HI (November 14, 2016)

Terrestrial Planet Formation in the Solar System and Beyond

Department of Physics and Astronomy, West Chester University
West Chester, PA (September 16, 2016)

Kepler's Discovery of Worlds with Multiple Suns

Department of Terrestrial Magnetism, Carnegie Institution of Washington
Washington, DC (September 15, 2016)

Circumbinary Planets: New Challenges of Exoplanetary Astronomy

AOGS (Asia Oceania Geosciences Society)
Beijing, China (July 31 – August 5, 2016)

Giant Extrasolar Planets in the Habitable Zone

AOGS (Asia Oceania Geosciences Society)
Beijing, China (July 31 – August 5, 2016)

Habitability and Habitable Zone

Workshop on Extrasolar Planets: Formation and Dynamics
Bad Honnef, Germany (June 26 – July 1, 2016)

Planets and Binary Star Systems

Workshop on Extrasolar Planets: Formation and Dynamics
Bad Honnef, Germany (June 26 – July 1, 2016)

Iranian National Observatory (INO340)

Annual Meeting of the American Association of Advancement of Science
Washington, DC (February 13, 2016)

New Models of Terrestrial Planet Formation in Solar System

Institute for Astronomy, Dept. Geophysics & Atmospheric Sciences, University of Sao Paulo
Sao Paulo, Brazil (November 19, 2015)

Main Belt Comets: A new Class of Icy Asteroids

Institute for Astronomy, Dept. Geophysics & Atmospheric Sciences, University of Sao Paulo
Sao Paulo, Brazil (November 16, 2015)

Habitability in Solar System and Beyond

2nd COSPAR Symposium

Iguacu Falls, Brazil (November 9 – 13, 2015)

Extrasolar Planets: Two Decades of Mysteries, Challenges, and Triumphs

Department of Physics and Astronomy, West Chester University

West Chester, Pennsylvania, (August 27, 2015)

Formation of Terrestrial Planets in the Inner Solar System

Department of Astronomy, University of Tel Aviv

Tel Aviv, Israel (June 8, 2015)

Planets and Binary Stars Systems

Department of Physics & Astronomy, San Francisco State University

San Francisco, California (March 24, 2015)

Terrestrial Planet Formation in the Context of Giant Planet Migration

Department of Physics & Astronomy, San Francisco State University

San Francisco, California (March 23, 2015)

Terrestrial Planet Formation in the Context of Giant Planet Migration

Department of Earth, Planetary, and Space Science, UCLA

Los Angeles, California, (March 12, 2015)

Terrestrial Planet Formation in the Context of Giant Planet Migration

Queen Mary College

London, UK (February 5, 2015)

Terrestrial Planet Formation in the Context of Giant Planet Migration

Department of Applied Mathematics and Theoretical Physics, University of Cambridge

Cambridge, UK (February 2, 2015)

Formation and Evolution of Circumbinary Planets

Institute of Astronomy, University of Cambridge,

Cambridge, UK (February 4, 2015)

Terrestrial Planet Formation and the Origin of Mars

Max Planck Institute for Astronomy

Heidelberg, Germany (January 16, 2015)

Formation and Evolution of Circumbinary Planets

Institute for Theoretical Astrophysics, University of Heidelberg

Heidelberg, Germany (January 12, 2015)

Formation and Evolution of Circumbinary Planets
Department of Astronomy, University of Goettingen
Goettingen, Germany (December 4, 2014)

Terrestrial Planet Formation and the Origin of Mars
Department of Astronomy, University of Goettingen
Goettingen, Germany (December 4, 2014)

Formation and Evolution of Circumbinary Planets
Department of Astronomy, University of Jena
Jena, Germany (December 4, 2014)

Terrestrial Planet Formation and the Origin of Mars
Department of Astronomy, University of Jena
Jena, Germany (December 4, 2014)

Lecture Series on Terrestrial Planet Formation, Habitability, and Planets in Binary Stars
Summer course on Exoplanets
La Palma, Canary Islands (September 24 – October 2, 2014)

Formation and Evolution of Planets in and Around Binary Stars Systems
Living Together: Planets, Host Stars, and Binaries
Litomyšl, Czech Republic (September 8 – 12, 2014)

Terrestrial Planet Formation and the Origin of Mars
Department of Physics and Astronomy, University of Preston
Preston, England (August 5, 2014)

Terrestrial Planet Formation and the Origin of Mars
Hawaii Institute for Geology and Planetology, University of Hawaii
Honolulu, Hawaii (May 7, 2014)

Terrestrial Planet Formation and the Origin of Mars
NASA Goddard Space Center
Greenbelt, Maryland (March 7, 2014)

Terrestrial Planet Formation and the Origin of Mars
Department of Astronomy, University of Maryland
College Park, Maryland (March 6, 2014)

Terrestrial Planet Formation and the Origin of Mars
University of Missouri-Columbia
Columbia, Missouri (March 4, 2014)

Science with Kepler

University of Missouri-Columbia
Columbia, Missouri (March 3, 2014)

Terrestrial Planet Formation and the Origin of Mars

Department of Terrestrial Magnetism, Carnegie Institution of Washington
Washington, DC (February 26, 2014)

A New Model For the Formation of Terrestrial Planets and the Origin of Mars

Institute for Astronomy, University of Hawaii
Honolulu, Hawaii (February 5, 2014)

Terrestrial/Habitable Planet Formation in Solar System and Exoplanets

DLR
Berlin, Germany (December 16 – 19, 2013)

Dynamics of Planet Formation in Binaries and Outside

Exoplanets and Disks: Their Formation and Diversity
Kona, Hawaii (December 8 – 12, 2013)

Habitability and Habitable Zone

The 1st COSPAR Symposium
Bangkok, Thailand (November 11 – 15, 2013)

Science With Kepler

International Occultation Timing Association
Tehran, Iran (remote presentation via Skype, October 24 2013)

New Model of the Formation of Terrestrial Planets in Our Solar System

Institute for Astronomy, University of Vienna
Vienna, Austria (October 14, 2013)

Science With Kepler

Annual Meeting of the German Astronomical Society
Tuebingen, Germany (September 24 – 27, 2013)
Video at http://timmsrc.uni-tuebingen.de/Player/Player/UT_20130925_002_AG2013_0001

New Models of the Terrestrial Planet Formation in Our Solar System

Institute for Solar Physics
Frieburg, Germany (July 25, 2013)

Habitable Extrasolar Planets: Formation, Observation, and Challenges

International Symposium on Planetary Sciences
Shanghai, China (July 1 – 4, 2013)

Detecting Earth-Like Planets and Water Origin
International Symposium on Planetary Sciences
Shanghai, China (July 1 – 4, 2013)

Planets in and Around Binary Stars
Paris Observatory
Paris, France (May 21, 2013)

A Compound Model for the Origin of Earth's Water
Paris Observatory
Paris, France (May 21, 2013)

Lecture Series on Formation of Planetary Systems and Extrasolar Planets
UNESP, University Estadual Paulista
Guaratingueta, Brazil (April 29 – March 3, 2013)

Planets in and Around Binary Stars
Humboldt Foundation
Hannover, Germany (March 20, 2013)

Habitable Circumbinary Planets
Exoplanets in Multi-body Systems in the Kepler Era
Aspen, Colorado (February 9 – 16, 2013)

Formation Mars and Terrestrial Planets
University of Tuebingen, Department of Astronomy
Tuebingen, Germany (January 15, 2013)

Planets in and Around Binary Stars
University of Tuebingen
Tuebingen, Germany (January 15, 2013)

Planet Detection Using Transit/Eclipse Timing Variation Method
International Occultation and Transit Association
Tehran, Iran (remote presentation via Skype, November 2, 2012)

Planets with Two Stars
Korean Institute for Space Sciences
Daejeon, South Korea (September 3, 2012)

Exoplanets and KMTNet
Korean Institute for Space Sciences
Daejeon, South Korea (September 3, 2012)

Detecting Planets Using Transit Photometry: Current State and Future Prospects

Collaboration Meeting on Antarctic Survey Telescope
LiJiang Yunnan, China (August 16-18, 2012)

Planetesimal Capture by an Evolving Gaseous Giant Planet

Harvard University
Cambridge, Massachusetts (April 23, 2012)

The Quest for Habitable Planets

Astronomy Frontiers Talk
University of Hawaii-Manoa (March 13, 2012)

Habitable Extrasolar Planets: From Theory to Observation

Institute of Astronomy, Geophysics, and Atmospheric Sciences
University of Sao Paulo, Brazil (March 7, 2012)

The Search for Earth-like Planets Outside Our Solar System

Hawaii Space Lecture Series
NASA Pacific Regional Planetary Data Center and Hawaii Institute for Geophysics and
Planetology, University of Hawaii-Manoa (January 24, 2012)

***Transit Timing Variation Method: A Strong, Successful Technique for Detecting
Small Planets***

Institute for Astronomy and Space Physics, Ciudad University
Buenos Aires, Argentina (October 13, 2011)

Habitable Extrasolar Planets: From Theory To Observations

First Annual Binational Chilean-Argentinian Astronomy Meeting
San Juan, Argentina (October 3-7, 2011)

Detection of Habitable Trojan Planets Using Transit Timing Variation Method

Extreme Solar System II
Jackson Hole, Wyoming (September 11-17, 2011)

Terrestrial Planet Formation and Water Delivery

Workshop on the Origin of Earth's Water
Iceland (September 4-10, 2011)

Comets and the Origin of Earth's Water

810th Anniversary of Nasireddin Tusi
Azerbaijan University
Baku, Azerbaijan (June 16-18, 2011)

Extrasolar Planets: Theoretical and Observational Challenges

Qafqaz Univerity
Baku, Azerbaijan (June 15, 2011)

The Effects of Secular Resonances on Terrestrial Planets Formation

8th Humboldt Conference on Celestial Mechanics
Bad Hofgestain, Austria (March 21-26, 2011)

***From Planetesimals to Terrestrial Planets: Formation of Habitable Planets
In Binary Star Systems***

UNESP, University Estadual Paulista
Guaratingueta, Brazil (August 16, 2010)

Terrestrial Planet Formation Around M stars

Institute for Astronomy, University of Vienna
Vienna, Austria (May 13, 2010)

Origin and Activation of Main Belt Comets

Asian Oceania Geosciences Society (AOGS)
Singapore (August 11-15, 2009)

Dynamical Modeling of the Origin and Activation Mechanism of Main Belt Comets

IAU Symposium 263 (Icy Bodies of Solar System)
Rio De Janeiro, Brazil (August 3-7, 2009)

***Implications of Dynamical Stability For The Detection of Super-Earths Via
Transit Timing Variation Method***

Goldschmidt Conference
Davos, Switzerland (June 22-26, 2009)

Habitable Planet Formation in Binaries

Institute of Astronomy, University of Vienna
Vienna, Austria (June 18, 2009)

Formation of the Planets

Azad University
Tehran, Iran (April 13, 2009)

The Origin of Earth's Water

Institute for Theoretical Physics and Mathematics
Iranian National Observatory
Tehran, Iran (April 12, 2009)

Extrasolar Planets: Challenges Of Modern Planetary Science

University of Tehran
Tehran, Iran (April 11, 2009)

Extrasolar Planets: Challenges Of Modern Planetary Science

Sharif University of Technology
Tehran, Iran (April 8, 2009)

Detection of Super-Earth Planets via the Transit Timing Variation Method

American Geophysical Union
San Francisco, CA (December 15-19, 2008)

Dynamical Constraints on the Origin and Activation Mechanism of Main Belt Comets

Institute for Astronomy, University of Hawaii-Manoa
Honolulu, HI (September 10, 2008)

The Long-Term Stability and Prospects of the Detection of Terrestrial and Habitable Planets in Multi-planet and Multiple Star Extrasolar Planetary Systems

Extrasolar Planets in Multi-Body Systems: Theory and Observations
Torun, Poland (August 25-29, 2008)

Dynamical Constraints on the Origin and Activation Mechanism of Main Belt Comets

Asteroids, Comets, and Meteorites (ACM 2008)
Baltimore, MD (July 13-18, 2008)

Formation of Extrasolar Habitable Planets

Institute for Geophysics and Extraterrestrial Physics,
Technical University of Braunschweig
Braunschweig, Germany (July 8, 2008)

The Prospects of Detecting Super-Earth Planets via the Transit Timing Variation Method

Super-Earths Workshop
Nantes, France (June 16-18, 2008)

Prospects of The Detection of Short-Period Terrestrial-Class Objects in the Vicinity of Close-in Giant Planets

AbSciCon 2008
Santa Clara, CA (April 14-17, 2008)

Gas Density/Pressure Enhanced Regions as Favorable Places for the Formation of Planetesimals via Gravitational Instability

JPL Workshop on Planet Formation Processes and the Development of Prebiotic Conditions
Pasadena, CA (March 18-21, 2008)

Formation of Habitable Planets and the Origin of Water and Volatiles

George Mason University
Fairfax, VA (February 17, 2008)

Habitable Planet Formation in Extreme Planetary Systems

IAU Symposium 249: EXOPLANETS: Detection, Formation and Dynamics,
Suzhou, China (October 22-26, 2007)

From Dust to Habitable Planets

Planetary Science Institute
Tucson, Arizona (August 20-21, 2007)

Extreme Habitability: Formation of Habitable Planets in Systems with Close-in Giant Planets and/or Stellar Companions

Bioastronomy 2007
San Juan, Puerto Rico (July 16-20, 2007)

Habitability of Planets in Binaries

Extreme Solar Systems Conference
Santorini, Greece (June 24–29, 2007)

Models of Water Delivery to Earth

210th Annual Meeting of the American Astronomical Society
Honolulu, HI (May 27-31, 2007)

Habitable Planet Formation: A Review of Current Status

209th Annual Meeting of the American Astronomical Society
Seattle, WA (January 5-10, 2007)

Habitable planet formation; A review of current status

209th Annual Meeting of the American Astronomical Society
Seattle, WA (January 5 – 10, 2007)

Habitable planet formation in single and binary star systems

Department of Physics and Astronomy, University of Denver
Denver, CO (March 30, 2006)

Habitable planet formation in single and binary star systems

Department of Physics and Astronomy, University of Central Florida
Orlando, FL (February 8, 2006)

Planet Formation

Hawaii Institute for Geophysics and Planetology, University of Hawaii-Manoa
Honolulu, HI (December 2, 2005)

Current Status of Extrasolar Planets and New Challenges in Planetary Science

Department of Geology and Geophysics, University of Hawaii-Manoa
Honolulu, HI (September 16, 2005)

Habitable Planets in Binary Star Systems: New Challenges of Planetary Dynamics

Planetary Science Institute
Tucson, AZ (August 23, 2005)

Habitable Planets in Binary Star Systems: New Challenges of Planetary Dynamics
NASA/ Goddard Space Flight Center
Greenbelt, MD (August 17, 2005)

150 New Planets, 150 New Challenges
Mauna Kea Visitor Center
Mauna Kea, Hawaii Island, HI (June 10, 2005)

Habitable Planets and Water-Delivery in Binary Star Systems
General Meeting of NASA Astrobiology Institute
Boulder, CO (April 10, 2005)

Formation of Habitable Planets in Binary Star Systems
Aspen 2005 Winter Conference on Astrophysics
Planet Formation and Detection
Aspen, CO (February 12, 2005)

A World with Two Suns
Institute for Astronomy, University of Hawaii-Manoa
Honolulu, HI (January 26, 2005)

Extrasolar Planets; The Challenges of Planetary Science
American Center for Physics
College Park, MD (June 16, 2004)

Is Sun the Only Star with Planets?
NASA (Journey Through the Universe Program)
Washington, DC (October 20, 2003)

One Hundred Other Solar Systems; How Planetary Systems Are Formed?
George Mason University
Fairfax, VA (March 31, 2003)

A Study of the Stability of Multi-planet Extrasolar Planetary Systems
Institute for Geophysics and Planetary Physics, University of California, Los Angeles
Los Angeles, CA (December 12, 2002)

Rapid Migration of Small Solids in a Non-Uniform Solar Nebula
Department of Terrestrial Magnetism, Carnegie Institution of Washington
Washington, DC (November 22, 2002)

Challenges in Theoretical Astronomy
National Science Foundation
Washington, DC (July 9, 2002)

Extrasolar Planetary Systems; Theoretical Challenges

Commerce Science and Technology Fellowship Program
Department of Commerce, Carnegie Institution of Washington
Washington, DC (June 13, 2002)

Solid-Body Dynamics in Gravitationally Unstable Protostellar Disks

Department of Astronomy, University of Maryland-College Park
College Park, Maryland (May 21, 2002)

Extrasolar Planetary Systems; What Is So Special About Them?

Department of Physics and Astronomy, Southwest Missouri State University
Springfield, Missouri (April 2001)

A Review of the Status of Planets Around Other Stars

Department of Physics, Loyola University
New Orleans, Louisiana (March 2001)

Extrasolar Planetary Systems and Planetary Dynamics

Department of Physics and Astronomy, University of Mississippi
Oxford, Mississippi (January 2001)