

3RD ADVANCED SCHOOL ON EXOPLANETARY SCIENCE
Demographics of Exoplanetary Systems

May 27 - 31, 2019
Vietri sul Mare, Italy

PROGRAM

Sunday, May 26

- 9:00 am – 5:00 pm **Visit of Paestum archeological site**
Departure from Lloyd's Baia Hotel
Meeting time: 8:40 am
Expected return at 5:00 pm
- 7:00 pm – 8:00 pm **Welcome cocktail and preregistration**
Lloyd's Baia Hotel

Monday, May 27

- 8:00 am – 9:00 am **Registration**
- 9:00 am – 12:30 pm **Lectures**
- 2:30 pm – 6:30 pm **Lectures**

Tuesday, May 28

- 9:00 am – 12:30 pm **Lectures**
- 2:30 pm – 6:30 pm **Lectures**

Wednesday, May 29

- 8:30 am – 1:00 pm **Lectures**
- 2:30 pm – 7:30 pm **Tour of the Amalfi Coast**
- 7:30 pm – 10:30 pm **Social Dinner**

Thursday, May 30

- 9:00 am – 12:30 pm **Lectures**
- 2:30 pm – 6:30 pm **Lectures**

Friday, May 31

- 9:00 am – 12:30 pm **Lectures**
- 2:30 pm – 6:30 pm **Lectures**

Saturday, June 1

- 9:00 am – 6:30 pm **Hiking on the Path of the Gods**
Departure from Lloyd's Baia Hotel
Meeting time: 8:50 am
Expected return at 6:30 pm

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LECTURE PROGRAM

Monday, May 27

- 09:00 am Lecture #1 by **Alessandro Morbidelli**
Protoplanetary disks structure and evolution
- 10:00 am Lecture #1 by **Scott Gaudi**
Methods of Detecting Extrasolar Planets
- 11:00 am Coffee break
- 11:30 am Lecture #1 by **Andrew Howard**
Radial velocity and transit measurement techniques
- 12:30 pm - 2:30 pm Lunch and free time
- 2:30 pm Contribution #1 by **Jon Fernandez Otegi**
Exoplanet characterisation: linking theory & observations
- 2:45 pm Contribution #2 by **Rachel Fernandes**
Hints for a turnover at the snow line in the Giant planet occurrence rate
- 3:00 pm Lecture #2 by **Alessandro Morbidelli**
Dust dynamics
- 4:00 pm Coffee break
- 4:30 pm Lecture #3 by **Alessandro Morbidelli**
Accretion of protoplanets
- 5:30 pm Lecture #1 by **Sean Raymond**
Observational constraints and key processes
- 7:30 pm Dinner and free time

Tuesday, May 28

- 09:00 am Lecture #2 by **Scott Gaudi**
Determining Demographics of Extrasolar Planets from Surveys
- 10:00 am Lecture #2 by **Andrew Howard**
Mass, size, and period distributions
- 11:00 am Coffee break
- 11:30 am Lecture #4 by **Alessandro Morbidelli**
Type I migration
- 12:30 pm - 2:30 pm Lunch and free time
- 2:30 pm Contribution #3 by **Roxanne Ligi**
The mysterious case of HD169142
- 2:45 pm Contribution #4 by **Louise Nielsen**
Exoplanet demographics in the era of TESS
- 3:00 pm Lecture #3 by **Scott Gaudi**
What Have Direct imaging and Microlensing Surveys Taught Us About the Demographics of Long-period Planets?
- 4:00 pm Coffee break
- 4:30 pm Lecture #5 by **Alessandro Morbidelli**
Gas accretion and Type II migration
- 5:30 pm Lecture #2 by **Sean Raymond**
Hot super-Earths
- 7:30 pm Dinner and free time

Wednesday, May 29

- 08:30 am Lecture #3 by **Andrew Howard**
Eccentricity distribution
- 09:30 am Lecture #4 by **Scott Gaudi**
*Results on the Demographics of Long-period planets from Other
Detection Methods*
- 10:30 am Coffee break
- 11:00 am Lecture #6 by **Alessandro Morbidelli**
Resonance trapping during migration
- 12:00 pm Lecture #3 by **Sean Raymond**
Giant exoplanets
- 1:00 pm - 2:30 pm Lunch and free time
- 2:30 pm - 7:30 pm Tour of the Amalfi coast
- 7:30 pm - 10:30 pm Social dinner

Thursday, May 30

- 09:00 am Lecture #5 by **Sean Raymond**
Solar-System formation: classical models
- 10:00 am Lecture #1 by **Antonino Lanza**
Star-planet tidal interaction
- 11:00 am Coffee break
- 11:30 am Lecture #4 by **Andrew Howard**
Orbital inclination and obliquity
- 12:30 pm - 2:30 pm Lunch and free time
- 2:30 pm Contribution #5 by **Gabriele Pichierri**
The onset of instability in resonant chains
- 2:45 pm Contribution #6 by **Andrew Bunting**
Non-adiabatic tidally induced stellar oscillations
- 3:00 pm Lecture #5 by **Scott Gaudi**
*Synthesizing Results from Various Surveys and Constraints on Planet
Formation Theories*
- 4:00 pm Coffee break
- 4:30 pm Lecture #5 by **Sean Raymond**
Solar-System formation: alternative models
- 5:30 pm Lecture #6 by **Sean Raymond**
Origin of Earth's water and of water on rocky exoplanets
- 7:30 pm Dinner and free time

Friday, May 31

- 09:00 am Lecture #2 by **Antonino Lanza**
Tides and the evolution of exoplanets
- 10:00 am Lecture #5 by **Andrew Howard**
Planet multiplicity
- 11:00 am Coffee break
- 11:30 am Lecture #3 by **Antonino Lanza**
Stellar irradiation and planet atmosphere evaporation
- 12:30 pm - 2:30 pm Lunch and free time

- 2:30 pm Contribution #7 by **Francesco Flammini**
Planetary systems: dynamical evolution in star clusters
- 2:45 pm Contribution #8 by **Kristina Monsch**
The imprint of X-ray photoevaporation on the orbital distribution of giant planets

- 3:00 pm Lecture #4 by **Antonino Lanza**
Star-planet magnetic interactions and their impact on exoplanets
- 4:00 pm Coffee break
- 4:30 pm Lecture #6 by **Scott Gaudi**
What does the future hold?
- 5:30 pm Lecture #6 by **Andrew Howard**
Ultra-short period planets – distributions and properties

- 7:30 pm Dinner and free time