### **Session Program**

7-11 Jul 2025



## Detection and Dynamics of Exoplanets (DDE): Interplay between theory and observations

# Stability and dynamics of planetary systems

Physics Department, University of Coimbra, Auditorium C.1 Rua Larga, 3004-516 Coimbra, Portugal

## Tuesday 8 July

14:00	Stability and dynamics of planetary systems
	Location: Physics Department, University of Coimbra, Auditorium C.1, Rua Larga, 3004-516 Coimbra, Portugal
	14:00-14:30 Stability and dynamics of planetary systems
	<b>Speaker</b> Cristobal Petrovich
	14:30-14:45   Three-body resonances role in shaping planetary architecture   Speaker   Antoine Petit
	14:45-15:00 Dynamical Instability of Multi-planet Systems and Free-floating Planets Speaker Man Hoi Lee
	15:00-15:15 Dynamics of the AU Mic system as recently observed with CHEOPS Speaker Zoltán Garai
	15:15-15:30 Resonant state of planetary systems Speaker Jérémy Couturier
	15:30-15:45 Predicting the stability of planetary systems through chaos indicators Speaker Alexandru Căliman
L6:00	15:45-16:00 The Resonant Remains of Broken Chains from Major and Minor Mergers Speaker Rixin Li
16:30	Stability and dynamics of planetary systems Session   Location: Physics Department, University of Coimbra, Auditorium C.1, Rua Larga, 3004-516 Coimbra, Portugal
	16:30-16:45 Convergence of tori of maximal dimension towards tori of lower dimension in Hamiltonian systems close to integrable. Application to extrasolar planetary systems Speaker Jacques Laskar

#### 16:45-17:00

# Constraints on transit-detected system architectures from formation and dynamical studies

Speaker

Anne-Sophie Libert

#### 17:00-17:15 Breaking cold Jupiter resonance chains with stellar flybys

#### Speaker

Carolina Charalambous

#### 17:15-17:30 ExoNAMD: a community tool to gauge multi-planetary systems

#### Speaker

Andrea Bocchieri

#### 17:30-17:45

The impact of internal versus external perturbations on close-in exoplanet architectures

#### Speaker

Christina Schoettler

#### 17:45-18:00

Numerical approach to second-order canonical perturbation theory in the planetary n-body problem

#### Speaker

**Speaker** Alan Signor

Aya Alnajjarine

#### 18:00-18:15

Constraining the orbit of the retrograde planet in the  $\boldsymbol{\nu}$  Octantis system

#### 10.15

18:15

### Friday 11 July

