

## **Detection and dynamics of multiplanetary systems**

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Stars with more than one planet are among the most interesting systems to be studied, as they resemble more to our Solar System and are very good candidates to host planets like the Earth. However, the exact orbital parameters of these systems are difficult to determine, since the radial velocities signatures overlap. In addition, sometimes the interactions between the planets are strong and the orbits deviate from the traditional Keplerian ellipses, in particular when mean motion resonances are present. Dynamical studies are then very important to fully understand and characterize these systems. The most striking example is the determination of the true masses of the planets, instead of the minimal ones. In this talk I will review some techniques used to analyze such complex systems, illustrating with some real examples.