



Revealing Jupiter's interior with Juno

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The key to understand our origins is in the interiors of the giant planets. Because Jupiter was one of the first planets to form, its primordial envelope, accreted from the primitive solar nebula, contains crucial information to understand the physics and the chemistry of the protosolar disk that gave birth to the solar system. Heavy elements, even though they are a smaller constituent, are an important input in formation models and therefore crucial to understand the formation history of Jupiter.

In orbit since July 2016, Juno mission has lead to a radical change of our knowledge of Jupiter. Its highly accurate gravity data, allows us to calculate new models to understand Jupiter's interior structure and atmospheric dynamics. These models are used to determine the amount of heavy elements and its potential distribution in the interior of Jupiter. In this talk we present our optimized calculations that also explore the effect of different model parameters, towards a better determination of the mass of heavy elements and its distribution in Jupiter's interior.