

Apparent feature of the protoplanetary disk with embedded growing giant planet

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A series of the discoveries of extra-solar planets is revealing that the configurations of the discovered planetary systems have wide variety and the feature of our solar system may not be universal. The images of protoplanetary disks with embedded growing planets must provide clues to understanding the origin of the variety. ALMA (Atacama Large Millimeter/Submillimeter Array) will enable us to obtain the direct images of protoplanetary disks with protoplanets. Before upcoming observations, we will discuss the apparent feature of protoplanetary disks with growing gaseous planets, based on our hydrodynamic simulations for gas accretion flow onto a giant gaseous planet.