

PPS008-03

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巨大天体衝突と地球型惑星形成

Giant impacts and terrestrial planet formation

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At the final stage of terrestrial planet formation known as the giant impact stage, several tens of Mars-sized protoplanets collide with each other to form terrestrial planets. Such energetic collisions should have a great influence on the various features of the terrestrial planets such as the number, mass, and spin state of the terrestrial planets (e.g., Kokubo et al. 2006). Recently, we have developed the hybrid code that can handle both the long-term orbital evolutions of objects (N-body code) and the short-term collisional processes of objects (SPH code). We apply this hybrid code to the giant impact stage of terrestrial planet formation, and will discuss the results.