

From Dust to Planet via collisional growth

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We investigate collisional evolution from dust to planets in protoplanetary disks. For the collisional growth of dust, the bulk density evolution of dust aggregates is important. On the other hand, the random velocity evolution is needed to be considered for planetesimal growth. We take into account both effects consistently and then carry out the simulation for collisional growth from dust to planets. We show planets are possible to be formed via collisional growth of dust.

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