...previously, in 8.972...

From dust to rocks (µm to cm)

From rocks to planetesimals (cm to km)

From planetesimals to oligarchs (km to 0.1-10  $M_E$ )

From dust to rocks (µm to cm)

gravity, gas drag, dust settling, inelastic collisions

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From rocks to planetesimals (cm to km) gravity, gas drag, gravitational instability?, inelastic collisions?, turbulence?, vortices?

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#### From oligarchs to planets

Terrestrial: protoplanet collisions (10<sup>8</sup> yr)

Gas giant: runaway gas accretion, grav. instability? (10<sup>7</sup> yr)



