Forming Rocky Planets by Chondrule Accretion

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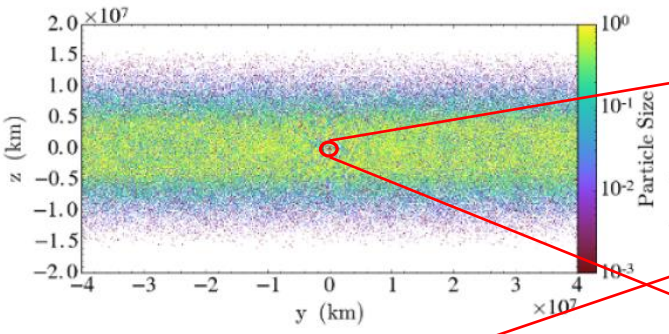
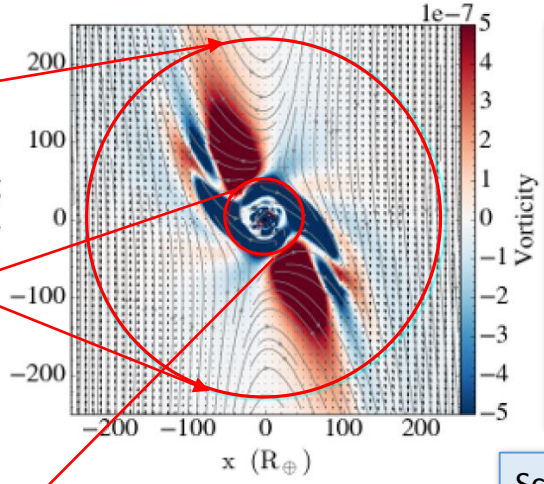
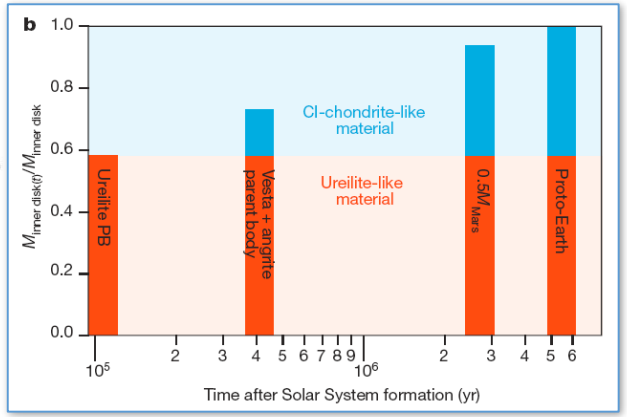
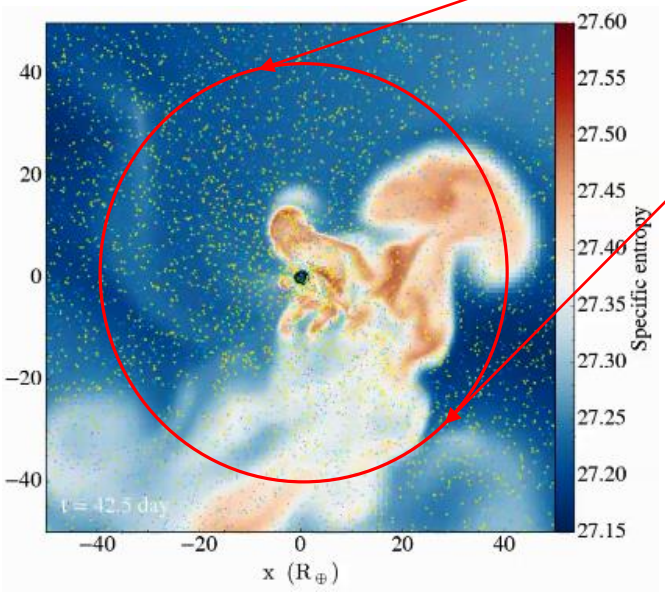
- **Popovas et al (2018, MNRAS): Rocky planes can form rapidly**
  - By accretion of mm-size chondrules, not dm-size "pebbles"
  - Hill sphere 3-D gas & dust dynamics with 500,000 scale range
  - Cancellation effects make growth rate estimates robust
- **Schiller et al (2018, Nature): Rocky planets did form rapidly**
  - Shown by systematic 48Ca isotope fingerprints
  - Confirmed by Fe isotope fingerprints (Schiller et al, 2019)

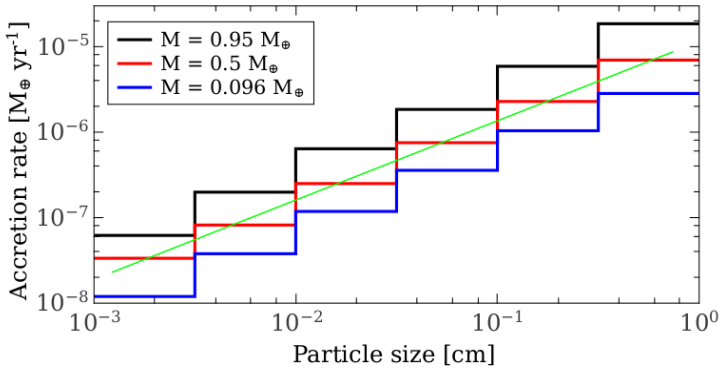






Schiller, Bizzarro & Fernandes (2018, Nature)





Popovas, Nordlund, Ramsey & Ormel (2018, MNRAS)

More details at this URL: