PROBING THE SOLAR ACCRETION DISK USING THE PROPERTIES OF DUST FILTERING AT GAPS IN THE EARLY SOLAR SYSTEM

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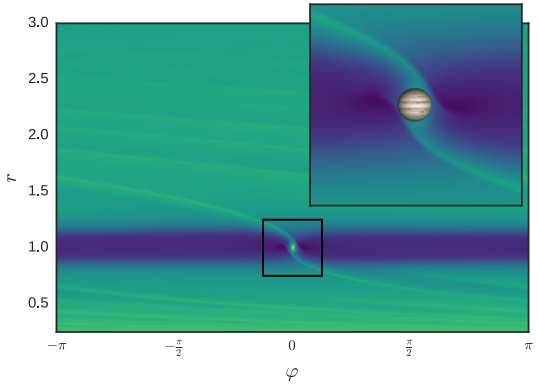
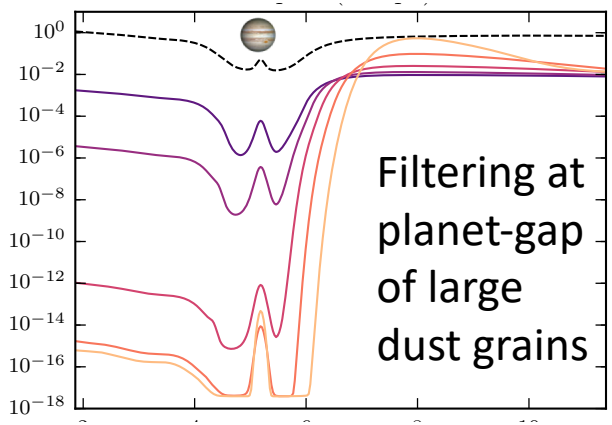
E-mail: haugboel@nbi.ku.dk

Troels Haugbølle, Philipp Weber, Daniel Wielandt, Pablo Benítez-Llambay, Martin Bizzarro, Oliver Gressel, Martín Pessah

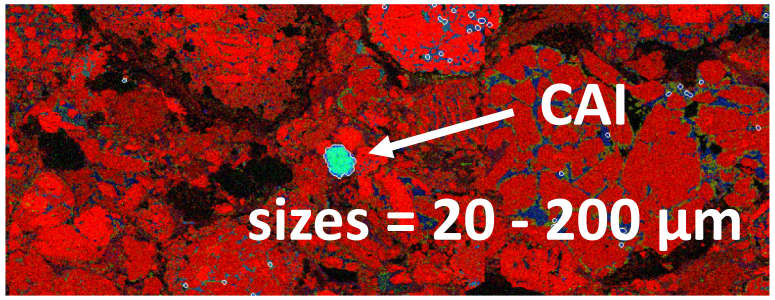
Combining models and meteoritics:

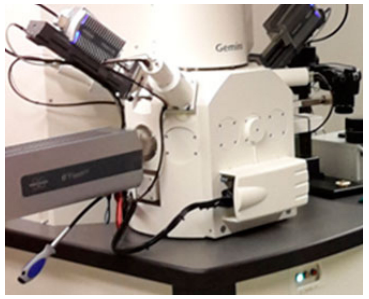
I) 2D disk models with gas, dust species, and planets



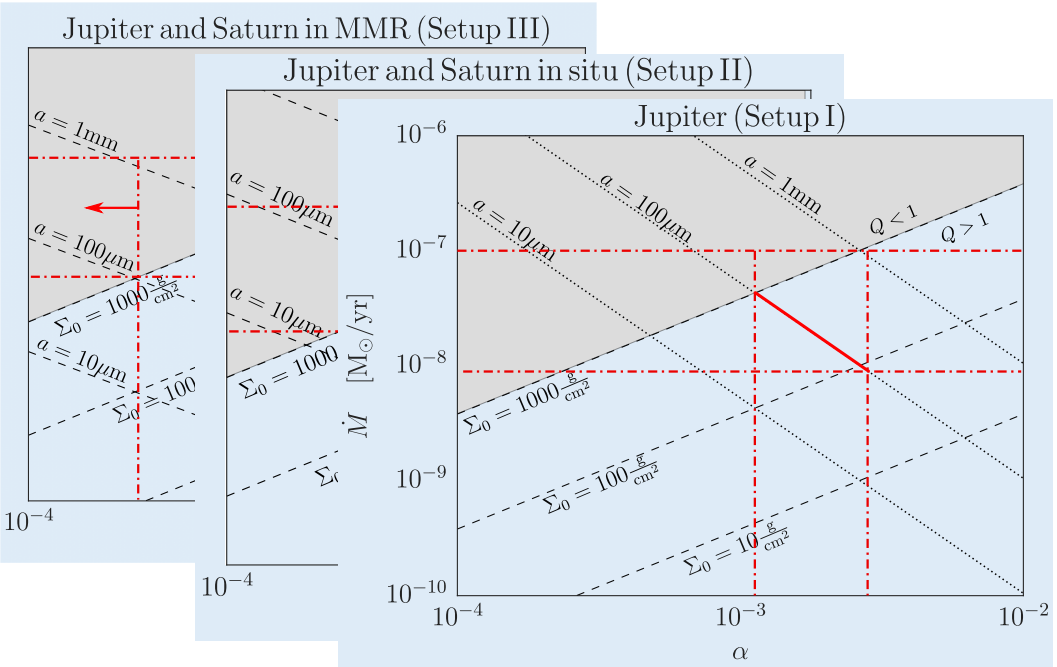


II) Lab search for CAIs in inner solar system meteorites





Results for the young Solar System:



i) Jupiter formed early (< 1 Myr)

ii) Density @ Jupiter: 100 - 1000 g cm^{-2}

iii) Viscosity @ Jupiter: α = 0.001 - 0.003

iv) Nice II model is incompatible with data