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SPECIAL COLLECTION: BUILDING PLANETS: THE DYNAMICS AND GEOCHEMISTRY OF CORE FORMATION

How to make a planet: An introduction†

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ABSTRACT

The Special Collection "Building Planets: The dynamics and geochemistry of core formation" aims to combine cutting edge experimental, analytical, and modeling results with review articles defining the state of the science and current challenges to our understanding of the origin, geophysics, and geochemistry of planetary cores. Our goal is to highlight novel and interdisciplinary approaches that address aspects of core formation and evolution at the atomic, grain, and planetary scales.

Keywords: Core formation, geochemistry of planetary materials, geodynamics of planets, highly siderophile elements, experimental petrology, meteoritics