

## TOPIC 6: Debris disks put into context: Solar system as a debris disk

### Debris disks put into context: The Solar system as a debris disk

#### *Our Invited Speaker*



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One of the goals of astrophysics is to understand the physical properties and volatile contents of the protoplanetary disk and the planetesimals that accreted in it. Asteroids and comets are the remnants of the original planetesimals that accreted in the original asteroid and cometary reservoirs located throughout the primordial solar system. The physical properties and volatile contents of asteroids and comets provide clues for the physical properties of their planetesimal parent bodies and the collisional processing that took place subsequent to their formation. Most asteroids and comets have followed a complicated evolutionary path where they escaped from the reservoirs and were dispersed through gravitational interactions with the giant planets. In addition to being dynamically processed, asteroids and comets have experienced collisional processing and thermal heating over their dynamical lifetimes. Therefore, testing the physical properties of the original planetesimals requires an understanding of how the physical properties and volatile contents of asteroids and comets have evolved in the different dynamical, collisional, and thermal environments they have experienced since their original formation in the protoplanetary disk.