**TOPIC 1 - Debris disks put into context: Connection to protoplanetary disks, planet formation**

***Our Invited Speaker***

Joan Najita (NOIRLab)

## Pebbles and Planetesimals to Planets and Dust

Protoplanetary disks are the starting point for debris disk evolution. I will review some of the known properties of protoplanetary disks, their possible connection to debris disk properties, and how observations of debris disks may lend unique insights into protoplanetary disk evolution and planet formation processes. As one example, the similar sizes and detection rates of the spectacular rings observed in protoplanetary disks and debris disks suggest that they share a common origin. New calculations illustrate how rings of pebbles and planetesimals can follow diverse evolutionary paths depending on their initial mass and planetesimal formation efficiency. By comparing these results with the known properties of disks, we are led to a simple picture in which large protoplanetary disks evolve into the known bright debris disks, with our Solar System following a distinct evolutionary path that originates in compact disks. Such comparisons lend insights into the efficiency of planetesimal formation and limit the existence of invisible disk reservoirs of solids.