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Contribution ID: 4592 Type: **Poster Competition (Graduate Student) / Compétition affiches (Étudiant(e) 2e ou 3e cycle)**

## **(G\*) (POS-77) Dense Annular Rings found in Two Class 0/I Protostellar Disks**

*Tuesday 28 May 2024 18:14 (2 minutes)*

We select two protostellar disks that are less than 500,000 years old, Oph IRS 63 and GSS 30 IRS 3, which have evidence of annular rings. For each disk, we use multi-wavelength, between 870 and 2000 microns, observations from ALMA to constrain disk models with and without rings using radiative transfer code, pdsy. We find that the models containing rings produce superior fits to both disks and that the location of the rings match previous studies. Additionally, we find that each ring is approximately 60% denser than its underlying disk, which could make these rings more likely locations for future pebble accretion, resulting in the formation of planetesimals and eventually planets.

### **Keyword-1**

star formation

### **Keyword-2**

protostellar disk

### **Keyword-3**

planet formation

**Author:** Mr TOBIN, Shamus (Queen's University)

**Presenter:** Mr TOBIN, Shamus (Queen's University)

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