Patrick McMillin PHYS 493 Dr. Lau 21 February 2018

Colloquium Date: 21 February 2018 **Colloquium Speaker:** Dr. Luca Ricci

Colloquium Title: Investigating the Early Formation and Evolution of Planetary

Systems: the ALMA Revolution

Speaker Affiliation: California State University Northridge, Jet Propulsion

Laboratory

This colloquium presentation was excellent. Dr. Ricci is an observational astronomer who has focused on studying the formation of planetary systems by mapping circum-stelar disks using infrared observations. By studying the spectra of these systems, it is possible to determine the density of the dust around stars, and compare the results with theoretical predictions made by computer simulations. He talked about how the ALMA observatories have vastly increased the resolving power of the infrared spectra taken. He also showed us some preliminary images of circum-stelar disks that have not yet been completely analyzed. This was very interesting, because the structure of the disks show some evidence for planetesimal formation or the presence of already created planets. Overall the speaker composed himself well and gave a very compelling talk. I hope to hear more about his research in the future.