Contribution ID: **5** Type: **not specified**

Signatures of accretion and MRI in protostellar disks

Thursday 7 August 2014 09:00 (30 minutes)

Accretion rates are usually diagnosed via boundary-layer emission. However, this does not directly reveal the stresses that transport angular momentum. If MRI is responsible, then it may be confined to active layers off the disk midplane at some radii. On the other hand, recent years have seen a growing body of observations of molecular emission lines from high altitudes in the disk, usually ascribed to radiative heating by stellar UV and X-rays. I will show that turbulent heating of active layers may also have observable consequences for the molecular lines, especially rovibrational CO transitions in the mid infrared from a few AU.

Author: Prof. GOODMAN, Jeremy (Princeton University)

Co-authors: Mr HENSLEY, Brandon (Princeton University); Mr ROTHE, Johannes (Princeton University)

Presenter: Prof. GOODMAN, Jeremy (Princeton University)

Session Classification: Thursday Morning

Track Classification: Workshop Main Programme