

Contribution ID: 17

Type: **not specified**

## The Effects of Far-UV Irradiation on the Thermal Structure of Disks

*Thursday, 7 August 2014 10:30 (30 minutes)*

It is generally expected that most low-mass young stars have a (time-variable) far-UV excess which is correlated with ongoing accretion. Although far-UV photons cannot ionise hydrogen, they are important for dissociating hydrogen, ionising carbon, as well as other processes (e.g., photoelectric heating of dust, pumping of molecular hydrogen). In this talk, I will present the results of radiation hydrodynamics models of protoplanetary disks that include far-UV irradiation plus chemistry. More importantly, I will focus on how far-UV photons alter the disk both thermally and structurally.

**Primary author:** Dr RAMSEY, Jon (Universität Heidelberg, Zentrum für Astronomie, Insitut für Theoretische Astrophysik)

**Co-author:** Prof. DULLEMOND, C.P. (Universität Heidelberg, Zentrum für Astronomie, Institut für Theoretische Astrophysik)

**Presenter:** Dr RAMSEY, Jon (Universität Heidelberg, Zentrum für Astronomie, Insitut für Theoretische Astrophysik)

**Session Classification:** Thursday Morning

**Track Classification:** Workshop Main Programme