

### **VUV Line Profiles of Sun as a Star from SUMER**

**Suman Panda** [[suman.panda@student.montana.edu](mailto:suman.panda@student.montana.edu)] and Charles Kankelborg, Montana State University, Physics Dept., Bozeman, MT, USA

We are analyzing full disk scans of VUV emission lines from SUMER onboard SOHO. With this data, we are trying to find explosive events to see how they affect the overall spectrum of the Sun. The explosive events generally have broadened spectra corresponding to Doppler shifts of  $\sim 100$  km/s. We expect that this will lead to broadening of the spectral line wings in the full disk spectra. We also want to see the changes in line profile as we go from center to limb of the Sun. This analysis is especially helpful in light of the planned launch of Full-sun Ultraviolet Rocket Spectrometer (FURST), in 2022. FURST is a sounding rocket spectrometer that aims to obtain full disk spectra of the Sun in VUV in high resolution. With SUMER data we want to have an idea about what FURST is going to see when it launches.