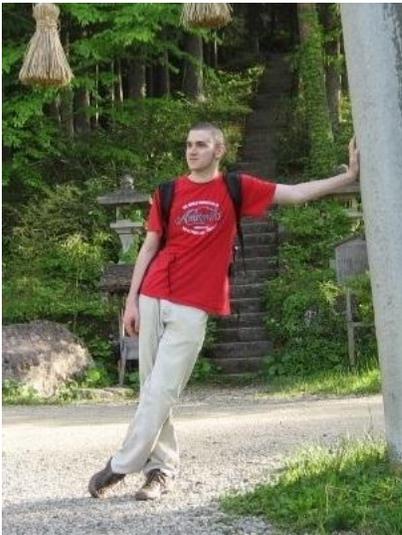


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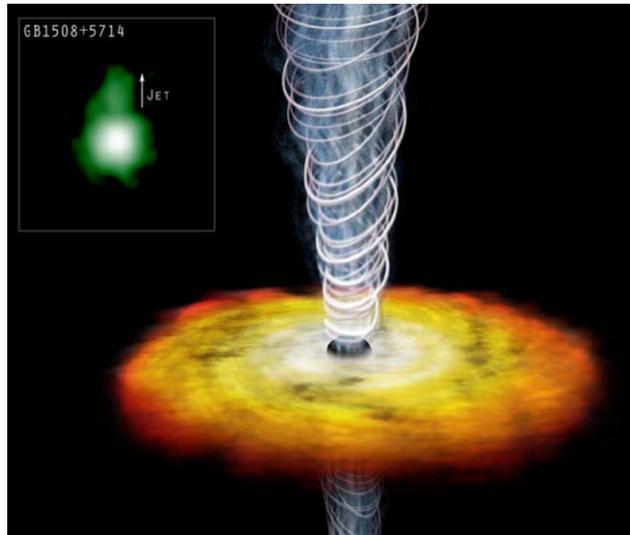
FRIDAY, 2:00 p.m., OCT. 7, 2011, Room A-106 SCI

*"Modeling the $H\beta$ Emission Line in
Luminosity-Averaged Quasar Spectra"*

Speaker: Zac Meadows



Zac Meadows



Quasar

ABSTRACT: *Quasars are extremely luminous Active Galactic Nuclei (AGN), thought to be powered by the accretion of matter onto supermassive black holes. Although they show stellar-like appearance on ordinary photographic frames, their spectra display broad emission lines from X-ray to infrared. We focus our study on bright quasar optical spectra obtained with a 2.5m telescope as part of the Sloan Digital Sky Survey (SDSS) project. We complement our sample with a subset of extremely luminous quasars whose spectra were obtained with the Very Large Telescope (VLT: 8.2m). The full sample spans almost six decades of bolometric luminosity, with the dimmest being comparable to a Milky Way-like galaxy and the most powerful being 10^5 times more luminous than that. We average quasar spectra with similar luminosity, model the $H\beta$ emission line and report on a few interesting correlations.*

Refreshments will be served beginning at 1:45 p.m.

About the speaker: Zac Meadows is a senior physics major studying at UWSP. His main area of interest is computational physics.