

* **Magnetic O-type stars in
the Galaxy and beyond**

Tuesday, February 17, 2015

Olin Life Science 130

4:00 - 5:00 pm



Dr. Gregg Wade

Since 2002, strong, organized magnetic fields have been firmly detected at the surfaces of about 10 Galactic O-type stars. In this talk I will review the characteristics of the inferred fields of individual stars, as well as the overall population. I will discuss the extension of the "magnetic desert", first inferred among the A-type stars, to O stars up to 60 solar masses. I will discuss the interaction of the winds of the magnetic stars with the fields above their surfaces, generating complex "dynamical magnetospheric" structures detected in optical and UV lines, and in X-ray lines and continuum. Finally, I will discuss the detection of a small number of variable O stars in the LMC and SMC that exhibit spectral characteristics analogous to the known Galactic magnetic stars, and that almost certainly represent the first known examples of extragalactic magnetic stars.