

## Title

### **RAMBO: The RAdio Magnetospheres of A, B and O Stars**

## Abstract

Hundreds of hot stars with OBA spectral types have been identified to host globally-organized, large-scale magnetic fields. These fields form magnetospheres, which share some fundamental similarities with those of planets, low-mass stars, and neutron stars. Namely, they show radio emission. However, the mechanism driving this emission from hot stars as well as its implications on stellar and magnetospheric characteristics are not well constrained. We propose observing 5 B-type stars that have strong magnetic fields ( $> 3$  kG) and short rotation periods ( $< 2$  days). We request single-epoch observations with the goals to i) obtain full monitoring of HD 142184 over its 0.5 day rotation period, and ii) observe 4 other stars, whose radio emission is yet undetected. With a total observing time of 32 hours, we will make important steps to verify a new theoretical model that for the first time associates stellar rotation with the radio flux.