

## V834 Cen

### Observation plan

100 ksec, single pointing, filter=OPEN, MXS=no preference,  
Non-ToO observation (but prefer to observe in the high state if possible; see below)  
No phase constraint (Spin period = 1.691 hr)  
Visibility opens during 2 July --14 Sep and 2 Jan – 12 Mar

### Immediate objectives

- [1] To demonstrate the new plasma diagnostic using optically thick resonance photons under optically-thin Collisional-Ionization-Equilibrium (CIE) plasma column, by measuring the enhancement of Fe-K resonance line in the pole-on phase.
- [2] To perform the benchmark test of the CIE-plasma code under the multi-temperature cooling-flow site on the magnetic cataclysmic variables (MCVs), using the plasma density derived from the method in [1] using the enhancement of the Fe-K resonance lines and comparing with the density diagnostic using Fe-K satellite lines.
- [3] To probe the cooling flow structure of the accretion column on MCVs, by measuring the line intensities and energies (inc. Doppler shifts and widths) from multiple atomic lines (Fe and lighter elements).