## M51

Observation plan
1 pointing, 160 ksec, (RA, DEC) = (13:29:57.90, +47:12:36.3)

## <u>Immediate objectives</u>

- [1] Measure the emission measure distribution (EMD) in at least two regions (nucleus and spiral arms) from  $6.0 < \log T[K] < 7.0$  in  $\Delta \log T[K] = 0.1$  bins, thereby obtaining the mass and energy budget.
- Search for NEI plasma and map its distribution.
- [3] Map abundances (O, N, Ne, Fe, Mg, and Si) to trace enrichment history.
- [4] Confirm CX in the nucleus from O vii and O viii and map its distribution.