

Resultados del Concurso 2003A para Observaciones en Gemini-Sur

Propuesta: GS-2003A-Q-2

Investigador Principal: Dr. S. Casassus (UCh)

Título: Isotopic ratios and physical conditions from the hyperfine structure and broadening of IR coronal lines in PN NGC6302

Resumen: NGC 6302 is a very high excitation Planetary Nebula (PN) with emission from a broad range of ionisation stages, up to [SiIX]3.94 μ m. A filled-in structure and small expansion velocities in an obscured core represent a unique astrophysical situation in which to: 1- look for hyperfine shifts in infrared coronal lines, and thereby measure isotopic ratios and probe s-processing in NGC6302's progenitor 2- improve our understanding of photoionised nebulae by using the information in the emission line profiles. Phoenix on Gemini South allows R~75000 spectroscopy of selected near-IR lines to be performed.

Tiempo asignado: 32 horas