Workshop

Stellar End Products: The Low Mass - High Mass Connection

ESO Garching, 6-10 July, 2015

Alizée Duthu LAB, France

Title:

Magnetic Fields in C-Rich Evolved Objects

Abstract:

During its evolution from Asymptotic Giant Branch to Planetary nebulae, the star's geometry is drastically changing. This transition is characterized by a high mass loss rate. A strong magnetic field may constrain the mass loss geometry of the star. We present here a study aiming to measure magnetic field strength in C-rich AGB and PPN/PN objects by observations of the CN Zeeman effect at 3mm (using IRAM-30m Xpol). We detect magnetic field for two AGB: IRC+10216 (B=2.5 G), RW LMI (0.95 G), one PPN AGFL618 (1.5 G) and PN NGC7027 (2 G) following the analysis described by Crutcher et al. (1996).