

Hilary Kay

Sun, Stars and Planets Group - Evolved Stars

Research interests – Very Late Thermal Pulse (VLTP) stars
eg. Sakurai's Object and V605 Aql

VLTP Stars

- Stars on white dwarf (WD) cooling track
- Undergo a VLTP and become a born-again red giant
- Retrace earlier evolution and cool to become WD
- Observed timescales much shorter than original models predicted

Current research

- Multi-wavelength observations of VLTP objects (radio, sub-mm, Infrared, optical)
- Determination of parameters such as central star re-heating rate, current dust mass, dust-to-gas ratio
- Aim to provide constraints on models of post-VLTP evolution