

Workshop

Stellar End Products: The Low Mass - High Mass Connection

ESO Garching, 6-10 July, 2015

Tsebrenko, Danny

Title:

Type Ia supernovae exploding inside planetary nebulae

Abstract:

Using three independent directions we estimate that the fraction of type Ia supernovae exploding inside planetary nebulae, termed SNIPs, is at least ~20%. We perform numerical simulations supporting SNIP origin for two supernova remnants (SNRs), Kepler's SNR and SNR G1.9+0.3. In particular, we explore the role of jets blown during or a little time before the supernova on the shape of the supernova remnant, and study the interaction of the supernova ejecta with previously ejected circumstellar matter and ISM.