



CLOUDY Modelling of IR Spectral Lines of Classical Nova Ejecta

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- Classical novae (CN): WD/MS companion binary, hydrogen accretion in disk & on WD surface
- Rise in temperature and pressure, thermonuclear runaway (TNR) ignites, explosion
 - TNR constrained to WD surface, explosion not entirely destructive (i.e. not Type Ia SN)
- Hydrogen and heavier, newly-fused metals ejected
 - Degree of ISM enrichment remains unknown
- Hydrogen, helium, other metals observed via IR emission lines
- Use CLOUDY to model the CN system, ejecta, and observed lines
- Model constrains ejecta chemical abundances, ISM enrichment



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