

High energy processes in Wolf-Rayet stars

Wolf-Rayet (WR) stars are massive stars that have evolved off the main-sequence and are undergoing advanced nuclear burning in their cores, rapidly approaching the end of their lives as supernovae. They are losing mass at very high rates and shocks associated with their metal-rich supersonic winds can produce strong X-ray emission, non-thermal (synchrotron) radio emission, and are potential sites for Galactic cosmic ray acceleration. I will summarize high-energy processes in WR stars, focusing on recent observations with the Chandra X-ray Observatory which are stringently testing current X-ray emission models based on the shocked wind paradigm.

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