
Heavy-Metal Abundances in DO-type White Dwarfs

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Abstract

Spectral lines of a variety of trans-iron elements were identified in high-resolution ultraviolet spectra of DO-type white dwarfs. Abundance determinations by means of non-local thermodynamic equilibrium stellar-atmosphere techniques have shown that, without exception, their abundances are unexpectedly strong supersolar (up to about five dex), much higher than predicted by asymptotic-giant-branch nucleosynthesis calculations. We present our analyses and discuss the photospheric trans-iron element prominence.

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