**Laboratory Atmosphere Model of the Hottest White Dwarf H1504+65**

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## ABSTRACT

H1504+65, a bare stellar nucleus, is an unusual white dwarf with a Carbon- and Oxygen-dominated atmosphere. The composition cannot be explained by current stellar evolution models. The analysis of the elemental abundance and the improvement of stellar atmospheric models depends heavily on spectral measurements and accurate spectral data. We used soft x-ray emission from a laser heated hohlraum to irradiate a foam target and obtained a Carbon-Oxygen plasma emission spectrum with temperature T=195 000K±10 000K and mass fraction ratio C/O=0.85, similar to that of H1504+65. We performed a detailed comparison of our spectra with the H1504+65 Chandra spectrum, and do observe the same O VI emission lines.