Title: On the Evolution of O(He)-Type Stars

Abstract:

O(He) stars represent a small group of four very hot post-AGB stars whose atmospheres are composed of almost pure helium. Their evolution deviates from the hydrogen-deficient post-AGB evolutionary sequence of carbon-dominated stars like e.g. PG 1159 or Wolf- Rayet stars. While (very) late thermal pulse evolutionary models can explain the observed He/C/O abundances in these objects, they do not reproduce He-dominated surface abundances. Currently it seems most likely that the O(He) stars originate from a double helium white dwarf merger and so they could be the successors of the luminous helium-rich sdO-stars. An other possibility is that O(He)-stars could be successors of RCB or EHe stars.

We present the results of a non-LTE spectral analysis of all four O(He) stars, based on optical, FUSE, and HST/COS observations.