

DETERMINING ELEMENT ABUNDANCES OF [WC]-TYPE CENTRAL STARS FOR PROBING STELLAR EVOLUTION AND NUCLEOSYNTHESIS

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[WC]-type CSPNs are hydrogen-deficient Central Stars of Planetary Nebulae showing strong stellar winds and a carbon-rich chemistry. Their spectra are often amazingly similar to those of massive WC stars. We have analyzed new high-resolution spectra of [WC]-type CSPN with the Potsdam Wolf-Rayet (PoWR) non-LTE expanding atmosphere models, using upgraded model atoms and atomic data. Previous analyses are repeated on the basis of the current models which now account for iron-line blanketing. We especially focus on determining the chemical composition, including some trace elements like nitrogen which are of key importance for understanding the evolutionary origin of the hydrogen-deficient Central Stars.