

O VI CENTRAL STARS OF PLANETARY NEBULAE: NGC 2371

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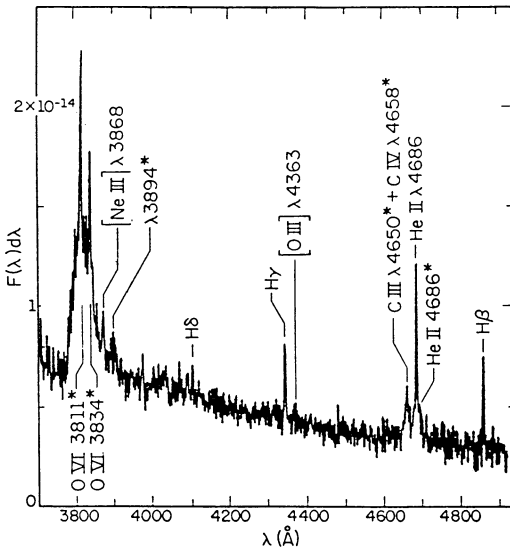
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We performed detailed spectral analysis of the planetary nebula NGC 2371 and its nucleus. The central star of NGC 2371 is a member of the O VI PNNi class, and it shows luminosity variations (Bond & Ciardullo 1990, ASP Conf. Ser. vol 11, *Confrontation between Stellar Pulsation and Evolution*, C. Cacciari & G. Clementini (eds.), p. 529) that could be associated to nonradial pulsations. From the spectrum of NGC 2371 we calculate the nebular parameters and the abundance of the most prominent ions. The nucleus is hot ($T_{\text{eff}} \geq 120,000\text{K}$) and luminous ($V=15.4$), it is probably close to the blue *bend* of the post-AGB evolutionary



sequence, and shows prominent O VI emission with (so far) unique double narrow-broad feature, as shown in the Figures. This feature can not be related to the shock front of the fast wind into the planetary nebula. This star has been analyzed together with the other O VI PNNi known. A preliminary correlation between the stellar parameters and the total O VI strength have been derived, and the locus of NGC 2371 on the $\log T_{\text{eff}} - \log L/L_{\odot}$ plane have been studied in relation to the locus of the post-AGB nonradial instability strips. These results, together with a study on the other O VI central stars of planetary nebulae, will be published in the near future.