

**SPECTROPHOTOMETRY AND MULTICOLOUR IMAGERY OF
THE PLANETARY NEBULA AROUND THE P CYGNI STAR AG
CARINAE**

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Some of the high luminosity stars in our Galaxy are surrounded by planetary-like nebulae formed by material ejected from the central star. The most interesting case is that of the ring nebula PK 289-0°1 around the P Cygni star AG Car. Long slit spectroscopy shows that nitrogen is overabundant and oxygen underabundant in the nebula. The $H\alpha/[NII]$ ratio is lower in the nebula with respect to the surrounding H II region, possibly as a result of the N overabundance in the stellar wind. The emission line peak separation confirms a model of a distorted spherical shell expanding at 66 km s^{-1} . The scattered star's spectrum is observable near the star, suggesting the presence of circumstellar dust grains. A nebular mass of at least $2.7 M_{\odot}$ is derived. While the nebula in the $H\alpha$ imagery reveals the ring-like shape with many structures, in the blue it is much fainter and smoother. No nebular emission was detected in the JHK bands, suggesting a low dust temperature.