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The Bizarre Central Star of SuWt2

Katrina Exter[1], Howard Bond[2], Don Pollacco[1], Philip Dufton[1]

[1]*APS Division, Dept of Pure and Applied Physics, Queens University Belfast, Belfast, BT7 1NN, UK*

[2]*STScI, 3700 San Martin Drive, Johns Hopkins University Homewood Campus, Baltimore, MD 21218 USA*

Abstract. SuWt2 has been found to contain a double lined and eclipsing binary system. Surprisingly, both components appear to be A-type stars with masses of about $3\,M_{\odot}$ moving in essentially circular orbits with a period of 4.9 days. We see no indications of a hotter component in the optical or IUE spectra. We discuss the possibility that this is a triple system.

Deep Hα + [N II] images show the nebula to be an inclined ring ($\sim 60^{o}$ to the line of sight) while spectra show anomalous line ratios (*eg* I([N II] 6584) >> I(Hα)) which maybe indicative of recombination in a changing radiation field. Further modeling is ongoing.

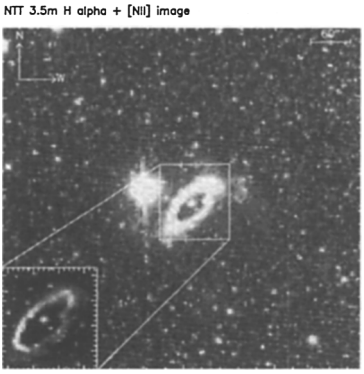

Figure 1. Narrow-band image of SuWt2. The faint bipolar lobes are only faintly visible on the original CCD image.

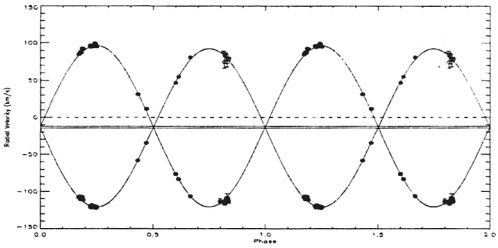

Figure 2. SuWt2 double lined radial velocity curve