from an observationally determined set of frequencies. In this work we analyse the 1995 campaign of WET (eXtended COVerage 12 or XCOV12) for PG1351+489 and, after the reduction process, we identify the pulsation frequencies (or periods) set in order to determine the pulsation modes of the star. These information can be compared with the HST data obtained in 2000 to verify possible variation of the main period.

PAINEL 42

## MULTIWAVELENGTH OBSERVATIONS OF V1082 SAGITARII

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V1082 Sgr is a cataclysmic variable (CV) which displays very distinctive signatures of a late-type star spectrum corresponding to a ≈ K4 secondary star over all its optical spectrum. This is a relatively rare situation for CVs, since in most cases, the combination of short orbital period / low luminosity of the secondary star / high luminosity of the accretion disk prevents the late-type spectrum from being visible at all in the optical region. More interesting still, V1082 Sgr alternates high and low states of brightness in which the contribution of the accretion disk ranges from a maximum to a minimum, respectively. Thus, this system offers us the opportunity to study both a "normal CV" configuration – with a prominent accretion disk – and a configuration where the secondary star dominates. The latter is particularly interesting since in that state one can study ellipsoidal variations, illumination effects and the nature of the secondary star itself with a minimum contamination from the accretion disk. Unfortunately, a very basic piece of information is still missing for V1082 Sgr: the orbital period. In order to determine this quantity, we have used the CamIV infrared imager at Laboratorio Nacional de Astrofisica/MCT to obtain J and H photometry of V1082 Sgr. The best candidate we have derived so far for the orbital period from the ellipsoidal variations in the infrared, namely 0.7348 d, is compared with the results from the UBVRI photometry and with the results from radial velocities. Finally, using the newly derived orbital period, we use the technique of Doppler tomography to examine the location of the main sources of line emission in the system and build a scenario for the structure of the binary in the framework of the present knowledge about CVs.



PAINEL 43

## HST ACCRETION DISC MAPPING OF IP PEGASI AT THE END OF THE MAY 1993 OUTBURST

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Recently Baptista, Haswell & Thomas reported an optical eclipse mapping experiment showing that the spiral structures were still present in the accretion disc of the dwarf nova IP Pegasi at the late stages of the May 1993 outburst, some 8 days after it has started. Here we report time-resolved eclipse mapping of IP Pegasi on the following nights of the same outburst. HST fast spectroscopy covering 3 eclipses is analyzed to produce velocity-resolved eclipse maps across the C IV λ1550 and He II λ1640 emission lines as well as in the ultraviolet continuum near λ1500Å. The maps reveal the final, complex evolution of the structures in the accretion disc as the system approaches and goes back to quiescence. The results are compared with those of Baptista, Haswell & Thomas and are discussed in the framework of the current models to explain dwarf nova outbursts.

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## MULTICOLOR ECLIPSE MAPPING OF IP PEGASI IN QUIESCENCE

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IP Pegasi is an intensively studied eclipsing dwarf nova with an orbital period of 3.8 hr. Doppler tomography of emission lines revealed the presence of conspicuous spiral structures during outburst in support of hydrodynamical disc simulations. The application of powerful indirect imaging techniques such as eclipse mapping and Doppler tomography, are useful to probe the dynamics, structure and the time evolution of IP Peg accretion disc in quiescence or in outburst. High-speed UBVR photometry of IP Peg is analyzed with eclipse mapping techniques to derive maps of the surface brightness distribution of its accretion disc in quiescence. For the reconstructions we used a tri-dimensional mapping surface consisting of a flared accretion disc plus a disc ribbom at the radial position of the bright spot to account for out-of-eclipse orbital modulations. Here we present and discuss (i) the eclipse maps and their structures as a function of wavelength, (ii) a color-color diagram used to investigate the disc spectra as a function of position, (iii) a comparison of the derived radial