

CONSTRAINING THE BINARY PARAMETERS

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TPYX @ VLT GOAL Determine the orbital period and the mass-ratio **SETUP** * Phase-resolved optical spectroscopy (0.2 Å, 25 km/s) * Giraffe/Flames * IFU: Argus - 317 fibers *8.5 h (5 nights spread over 2 months) ***** R=12000 * 4501 - 5078 Å * 141 spectra (exp: 180 s)







TPYX @ MAGELLAN

GOAL

Continue the search for the orbital period and establish system parameters

SETUP

Phase-resolved optical spectroscopy (0.386 Å/pix, ~ 60 km/s)
IMACS

* Gra-1200-17.45 and slit Long_0.9
* 12.5 h (over 4 nights)
* 3600 - 5206 Å, over 4 CCDs
* 200 spectra (exp: 240 s)







HeII







Confirmation of the orbital period shows that T Pyx is an unusual system - it is much too bright for its orbital period

The low value of K1 is in line with a system which contains a massive WD, a low-mass donar and/or is view at a low inclination

There is evidence of significant shifts in the systemic velocity on super-orbital timescales

THANK YOU!