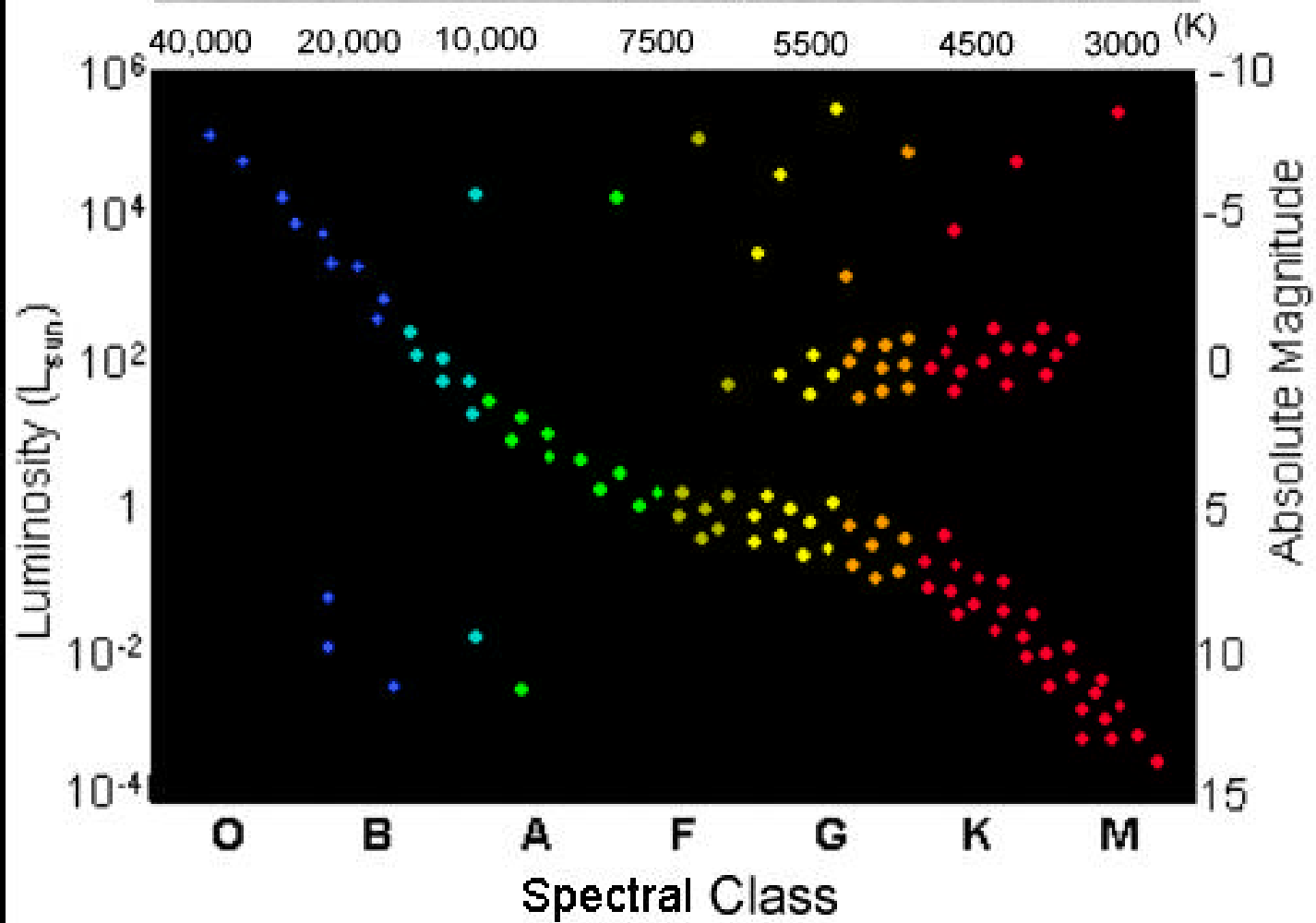
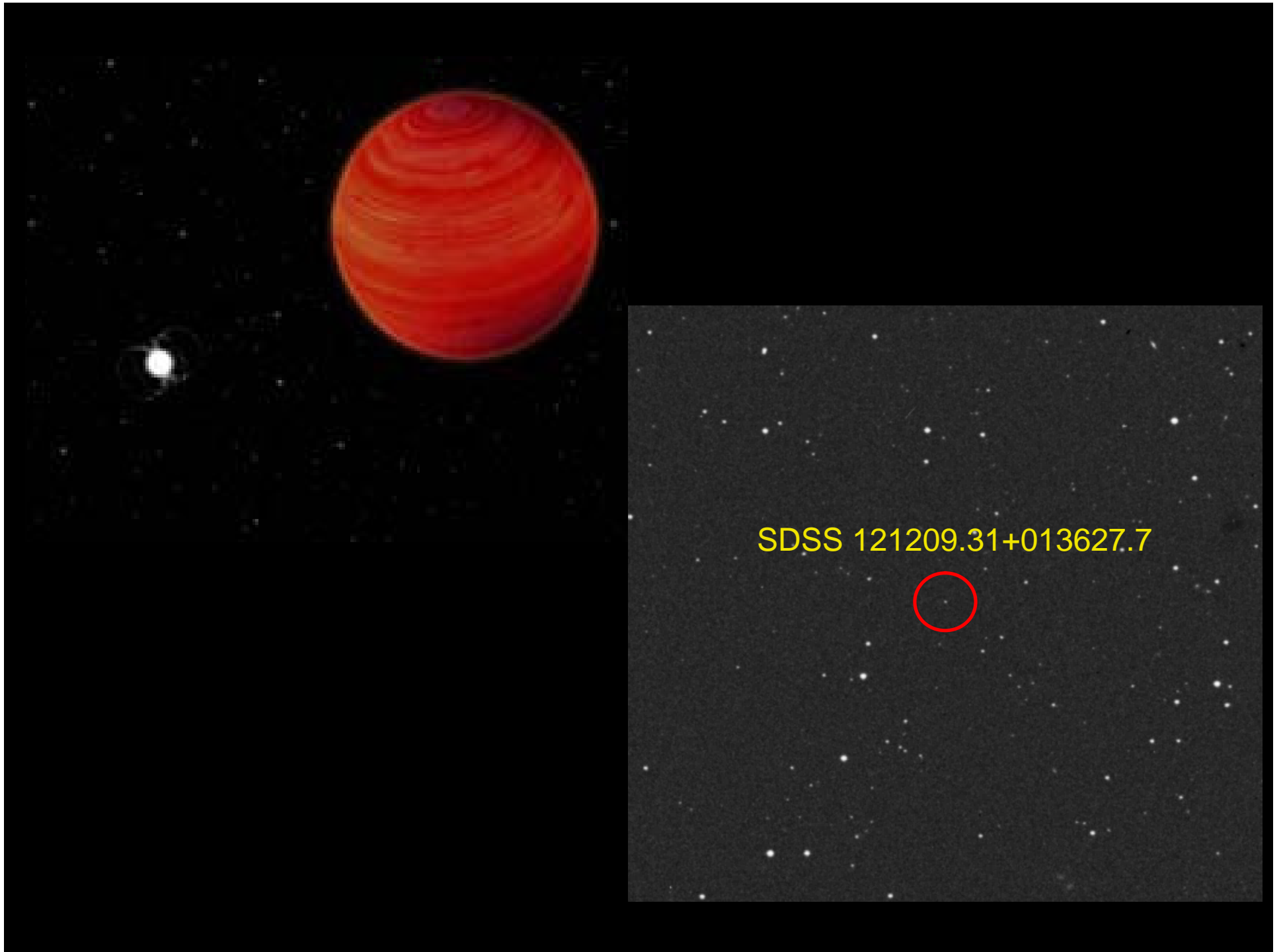


Detecting Substellar Companions to White Dwarfs

Mercedes López-Morales
Carnegie Institution of Washington

Schematic Hertzsprung-Russell Diagram





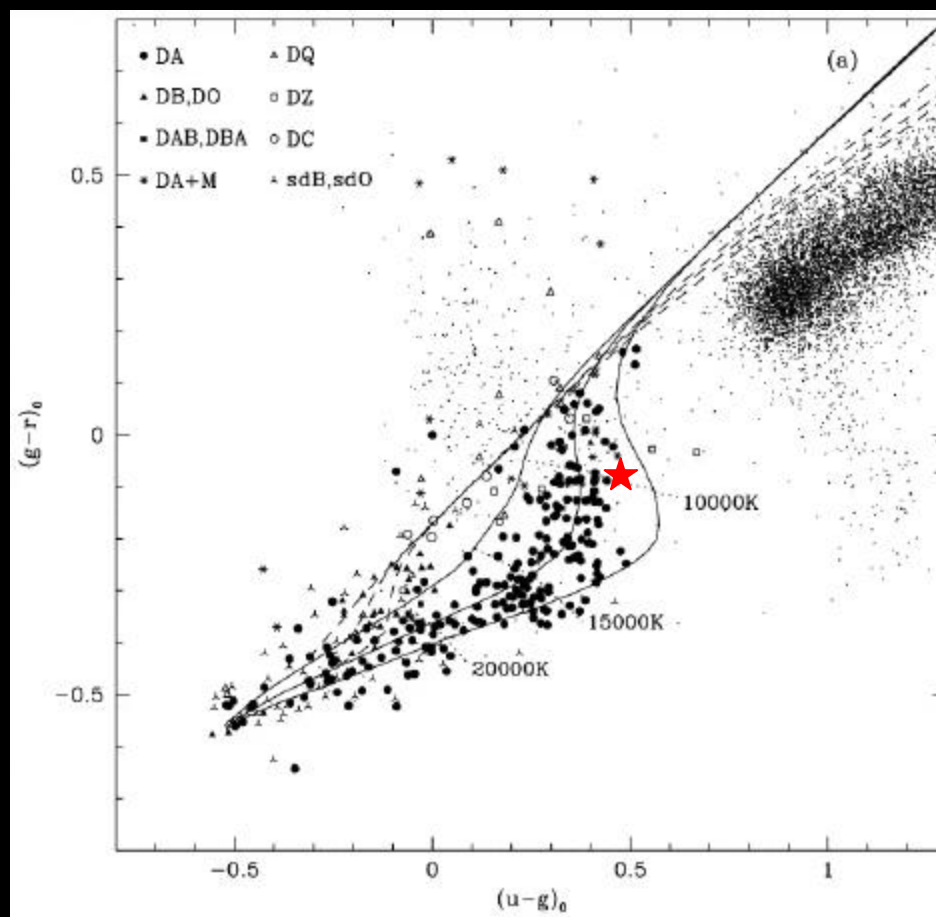
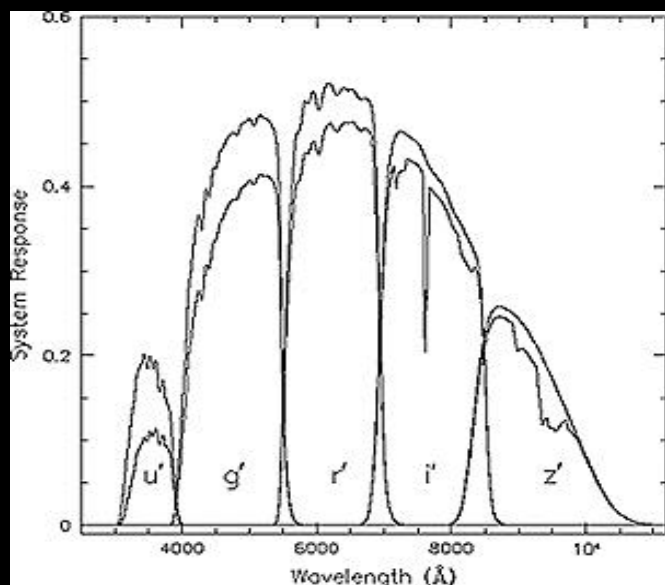
SDSS 121209.31+013627.7

SDSS Telescope

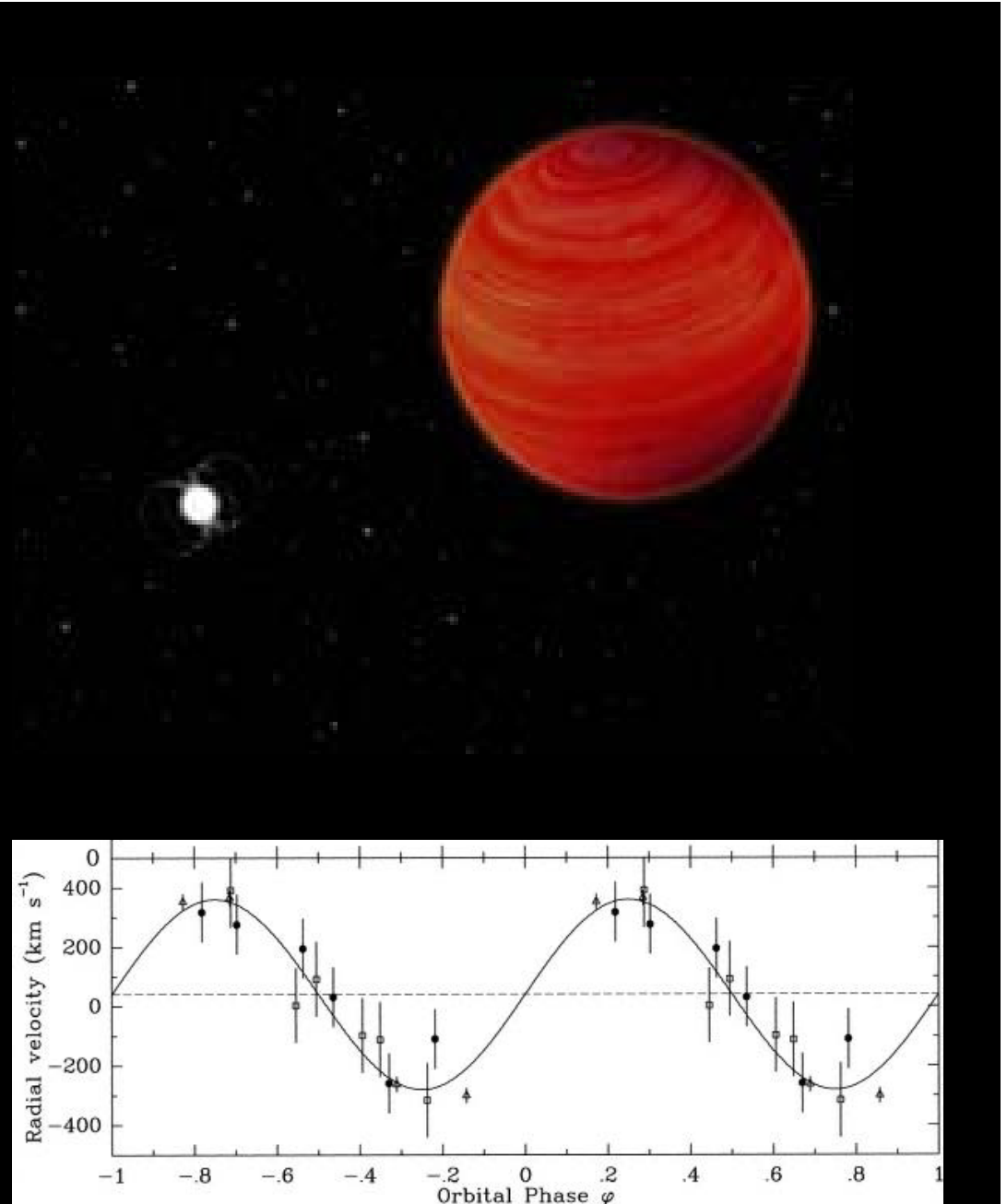
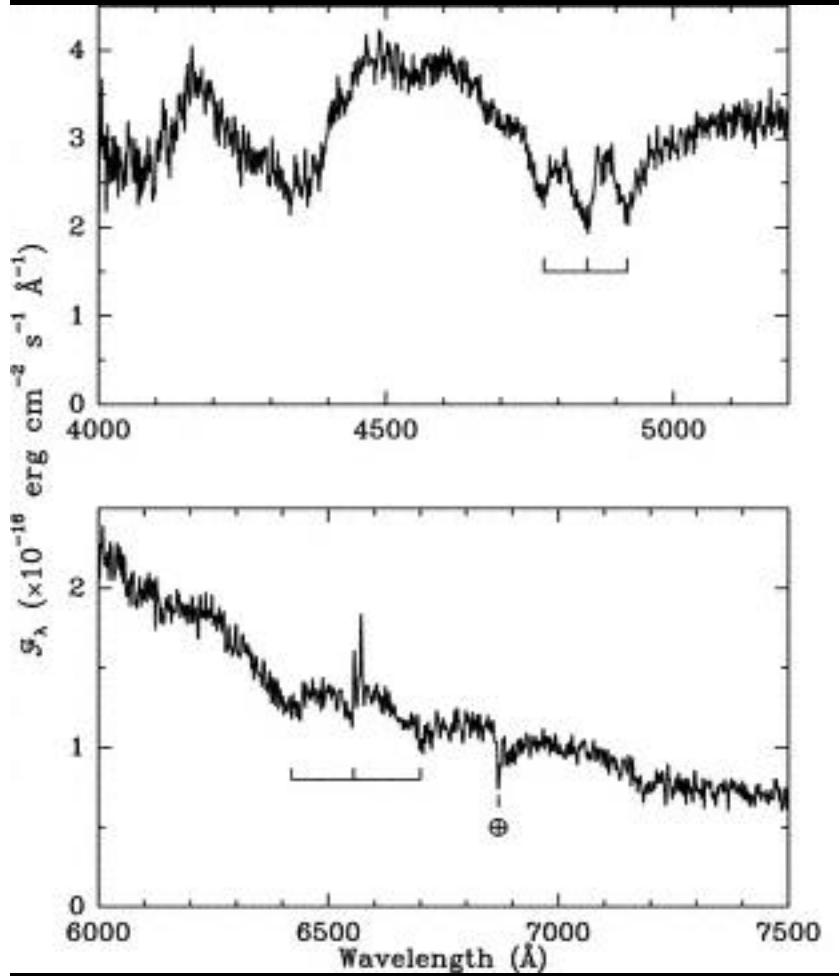


u'	g'	r'	i'	z'
18.42 ± 0.02	17.96 ± 0.01	18.06 ± 0.01	18.24 ± 0.01	18.40 ± 0.03

SDSS filters



(Harris et al. 2003, AJ,126,1023)

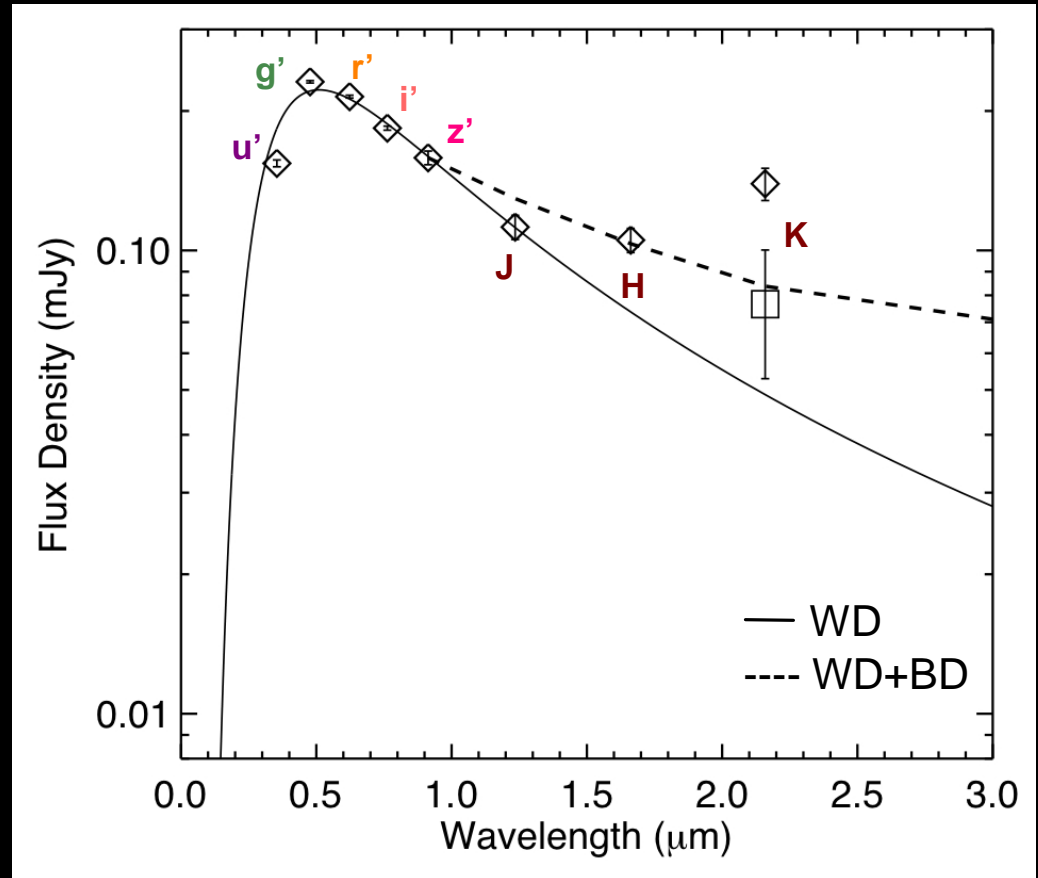


(Schmidt et al. 2005, ApJL,630,173)

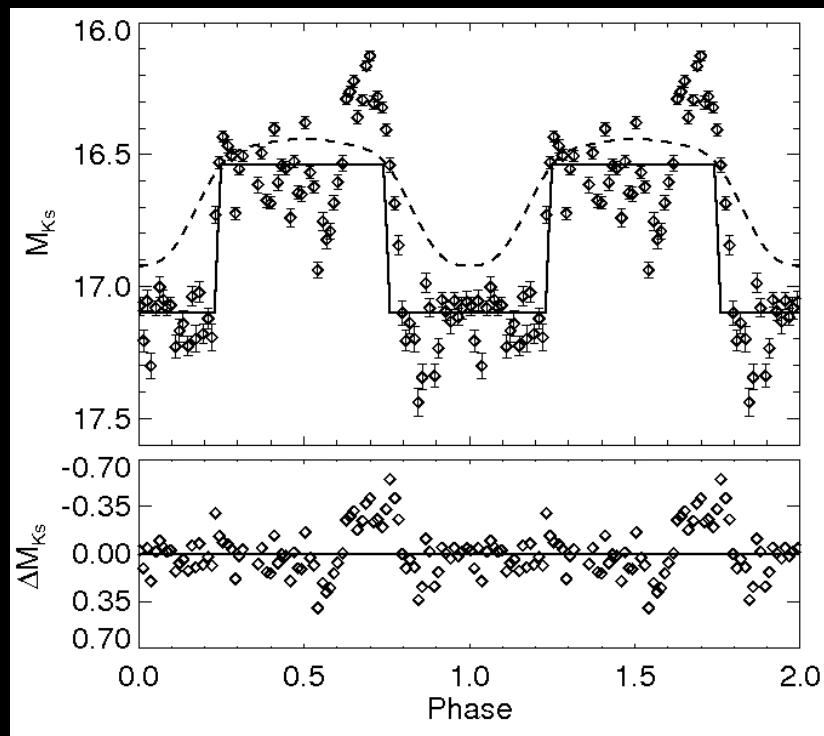
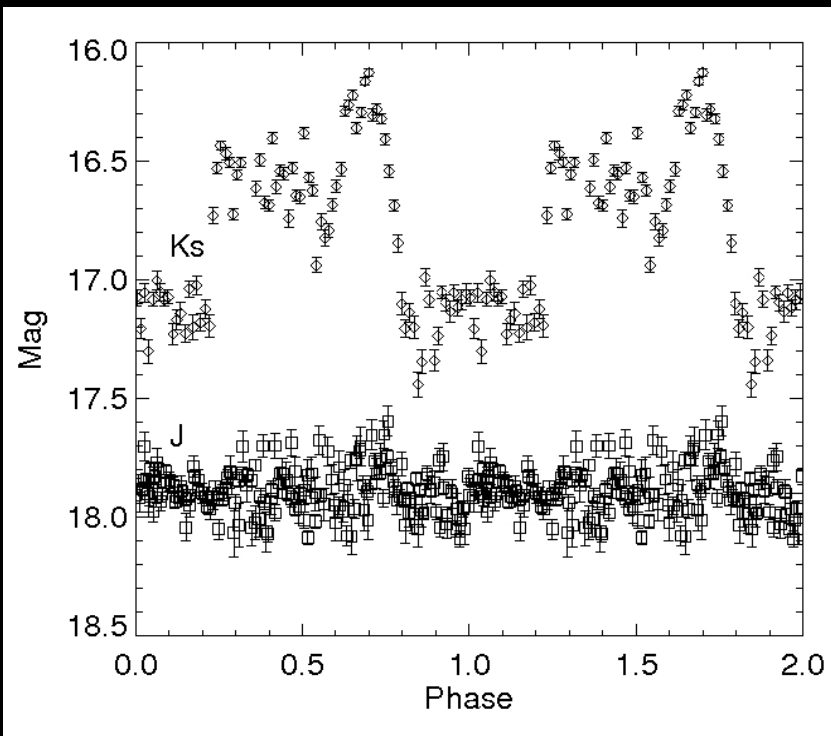
DuPont Telescope



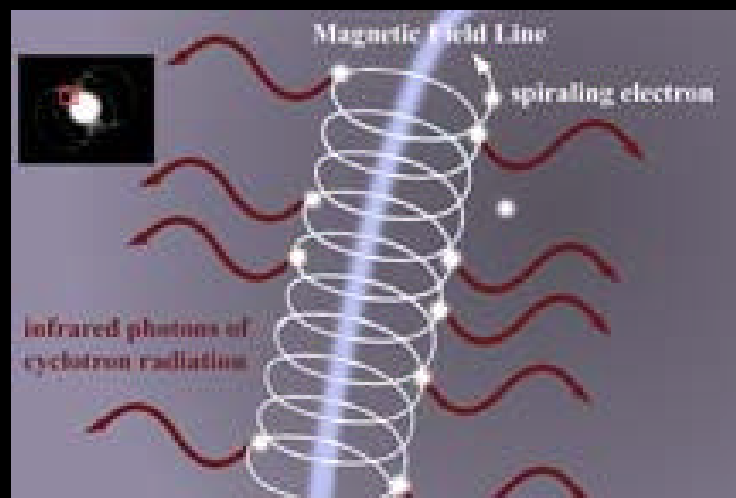
Magellan Telescopes



(Debes et al. 2006, to appear on ApJL)



Cyclotron emission



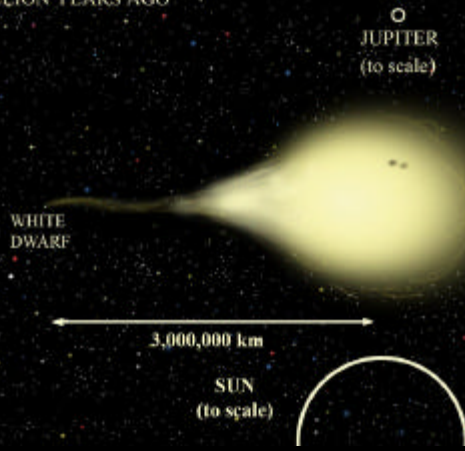
Possible Formation Scenarios

Scenario 1:

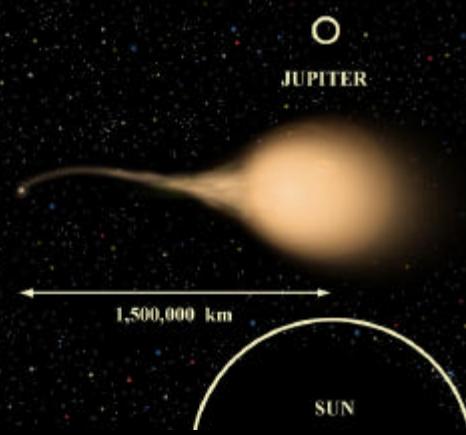


Scenario 2:

500 MILLION YEARS AGO



200 MILLION YEARS AGO



PRESENT DAY

