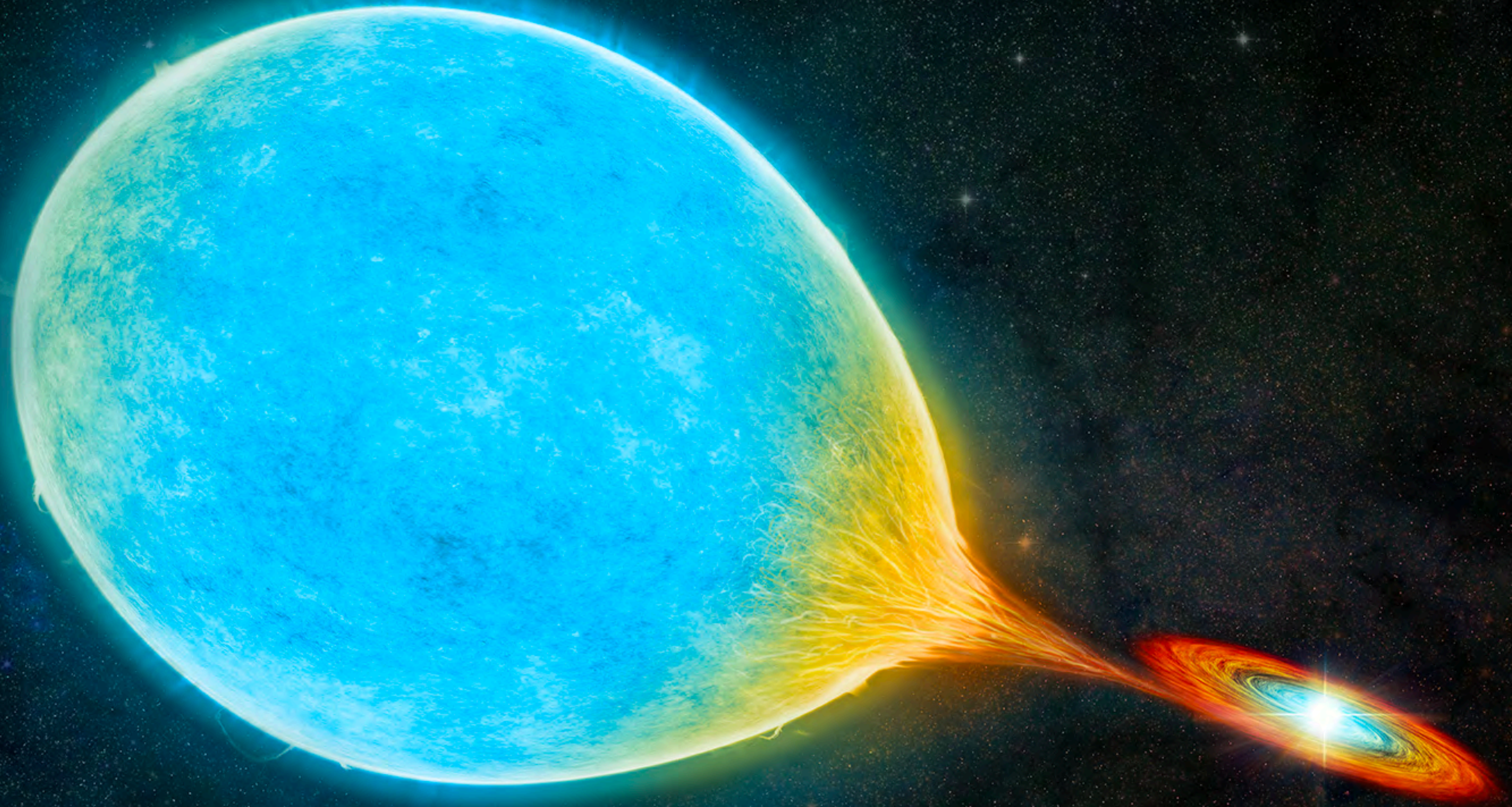


# Stellar astrophysics & binary evolution





(1) Grew up in Oregon

(3) Grad at UC Berkeley

(5) Faculty at Caltech

(4a) Postdoc at Harvard/CfA

(2) Undergrad at Yale

(4b) Postdoc at MPIA Heidelberg



# My group



Natsuko Yamaguchi (G2)



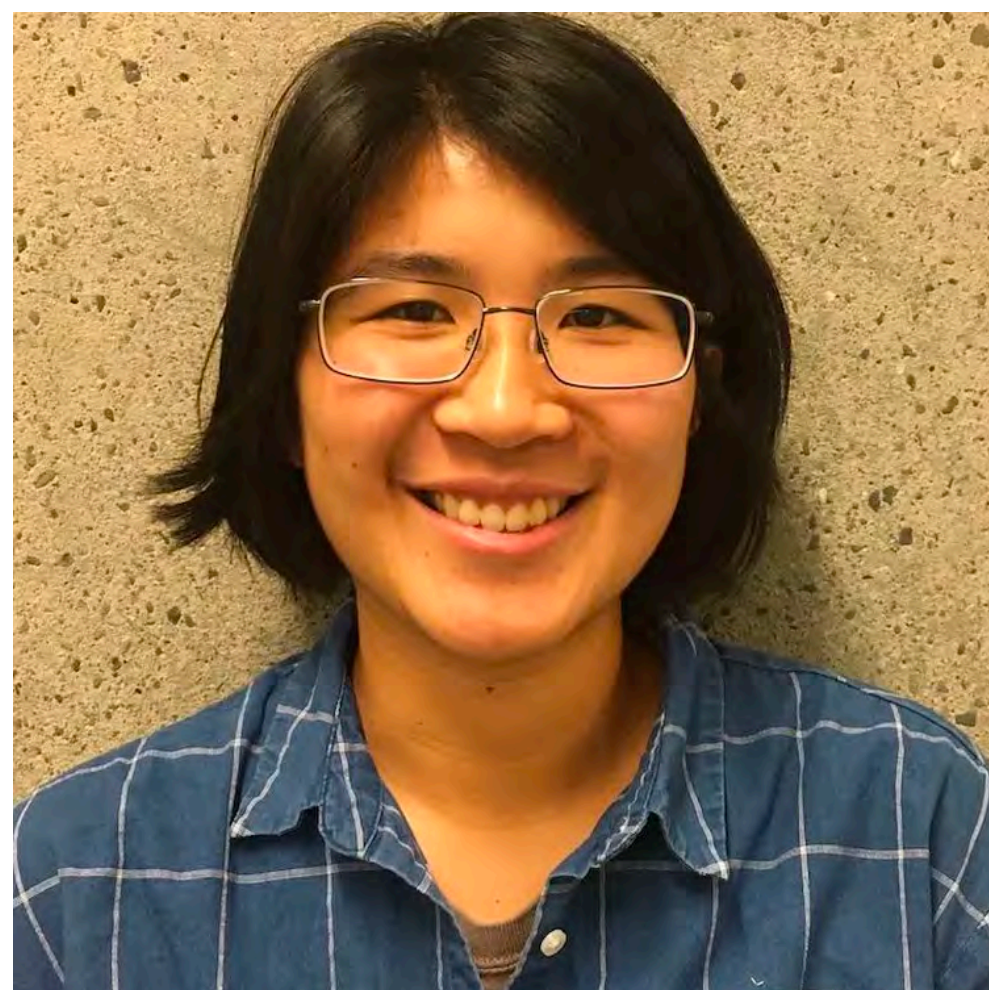
Pranav Nagarajan (G2)



Lisa Blomberg (G1)



Tony Rodriguez (G4)



Casey Lam (postdoc @Carnegie)



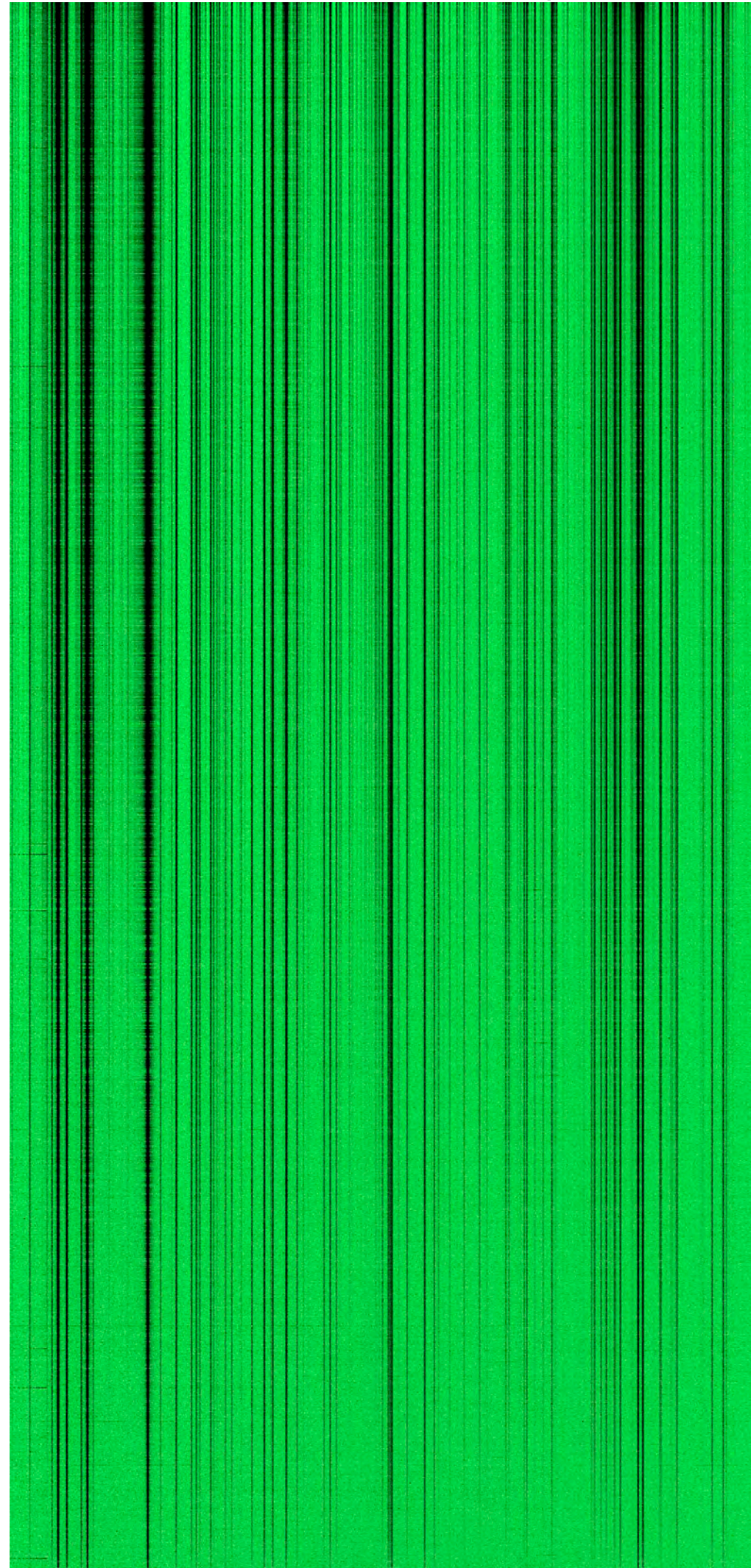
Evan Portnoi (3rd yr undergrad)



Umran Koca (2nd yr undergrad)

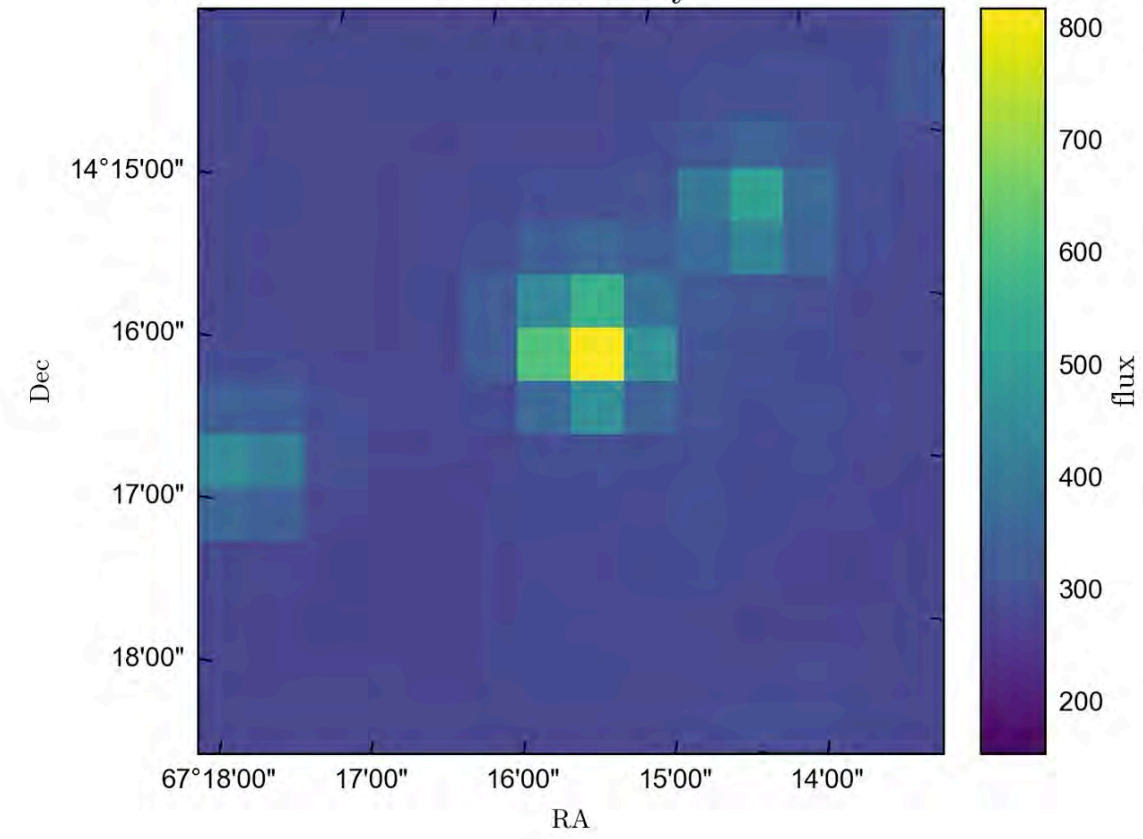
# Tools

Spectroscopic surveys

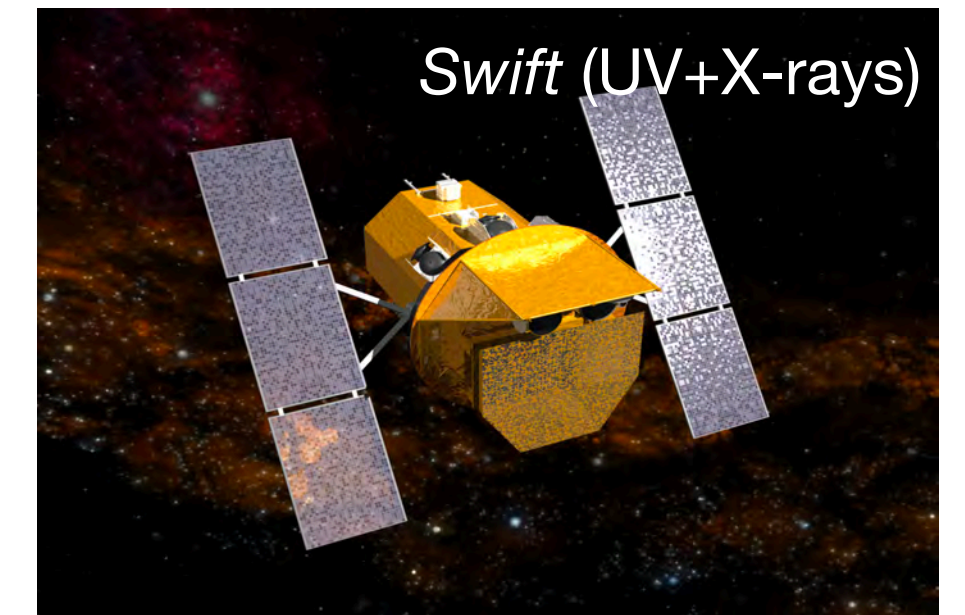
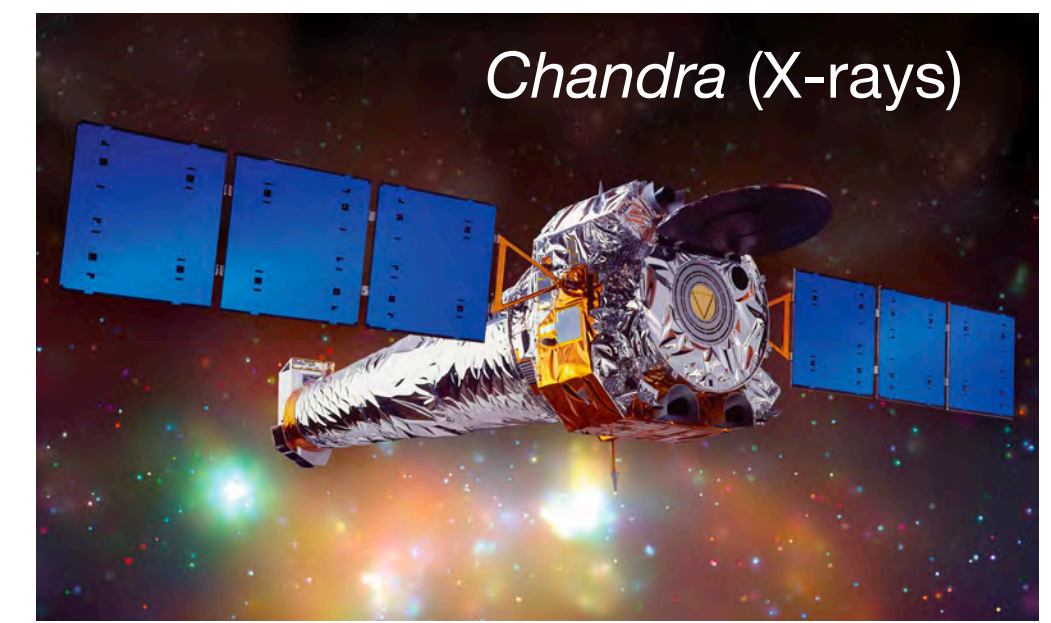
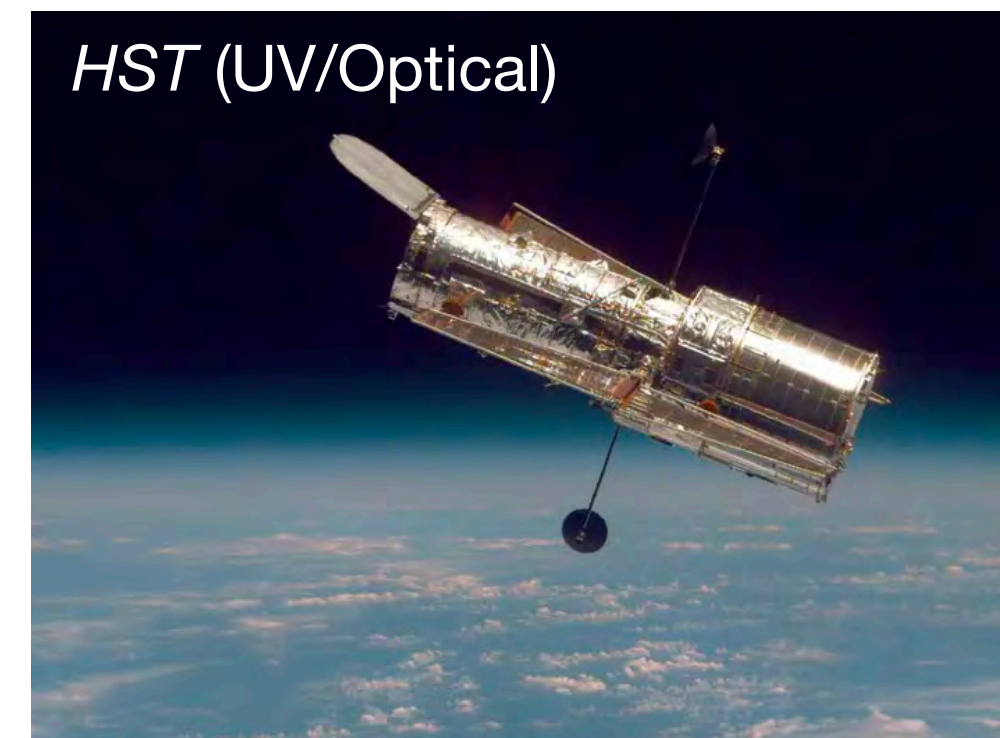
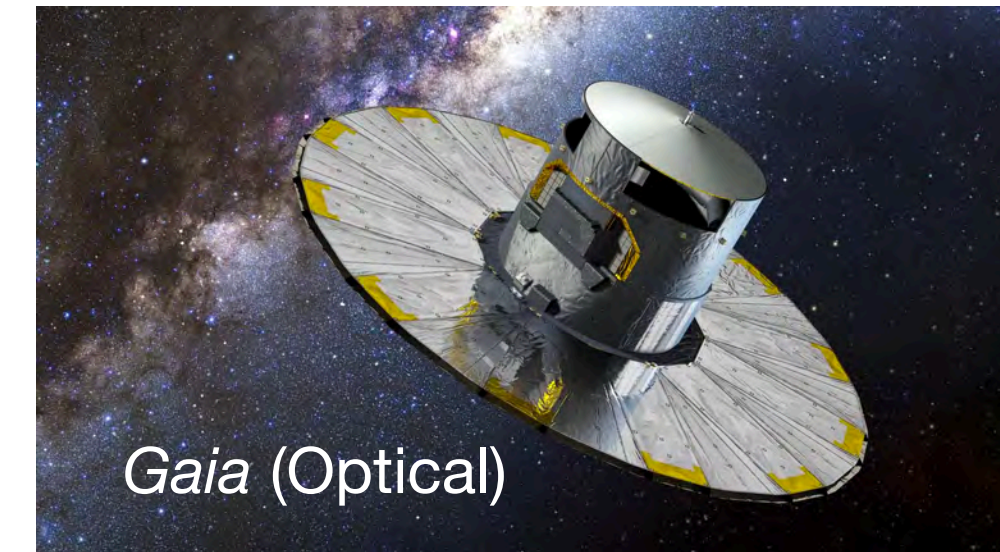
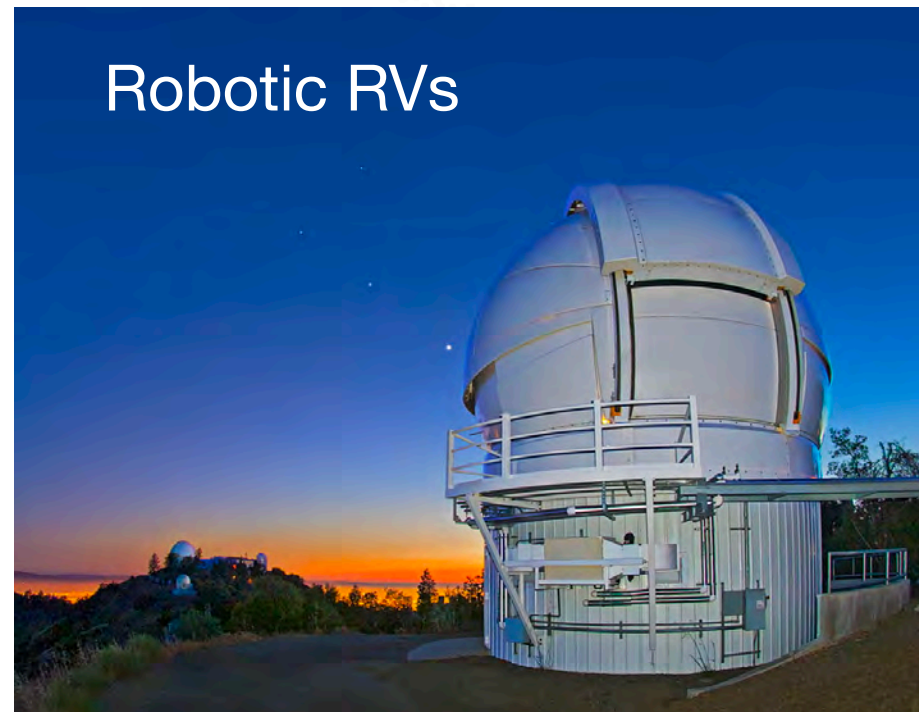


Light curves

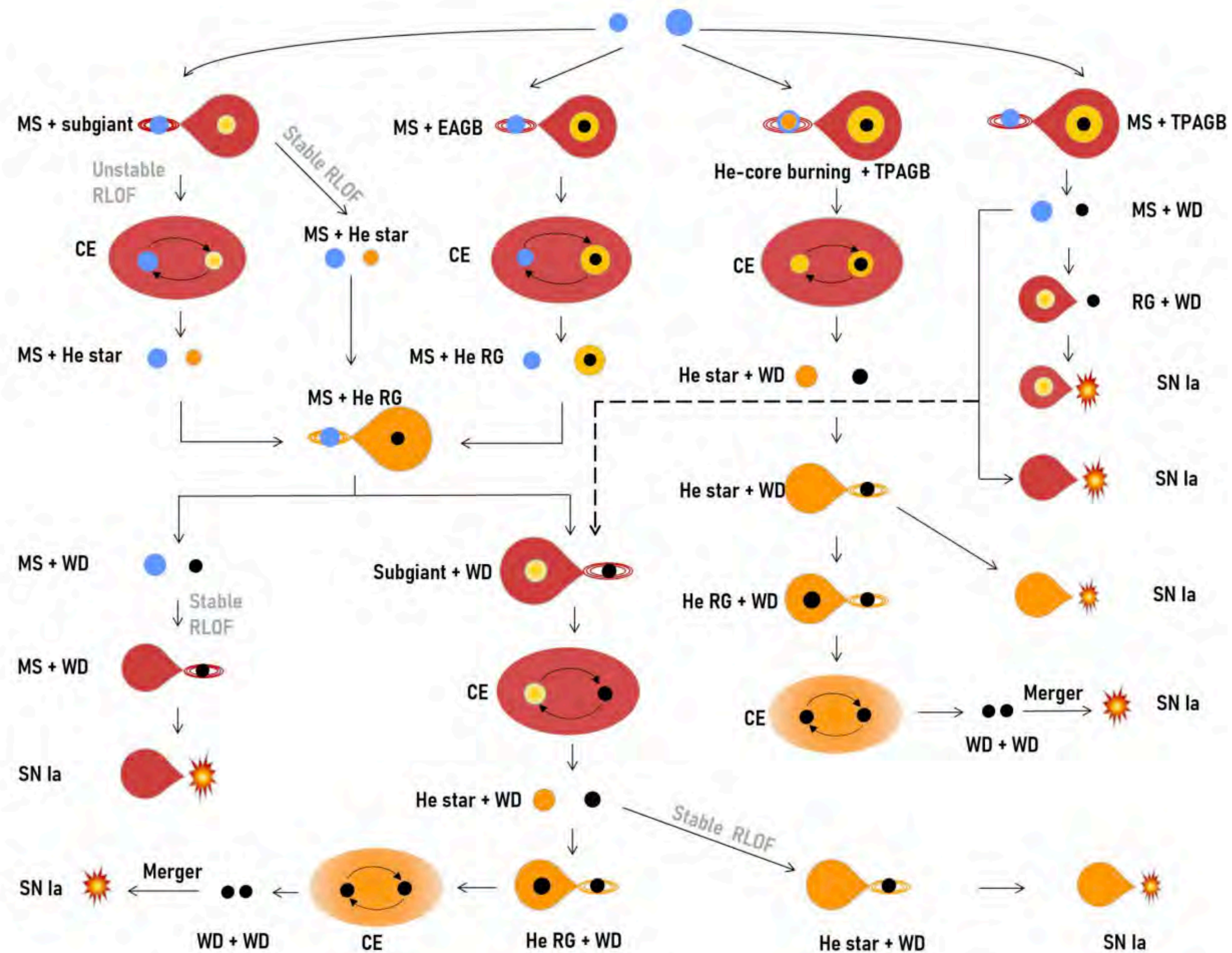
$t = 1438.00$  days



Robotic RVs



# MESA

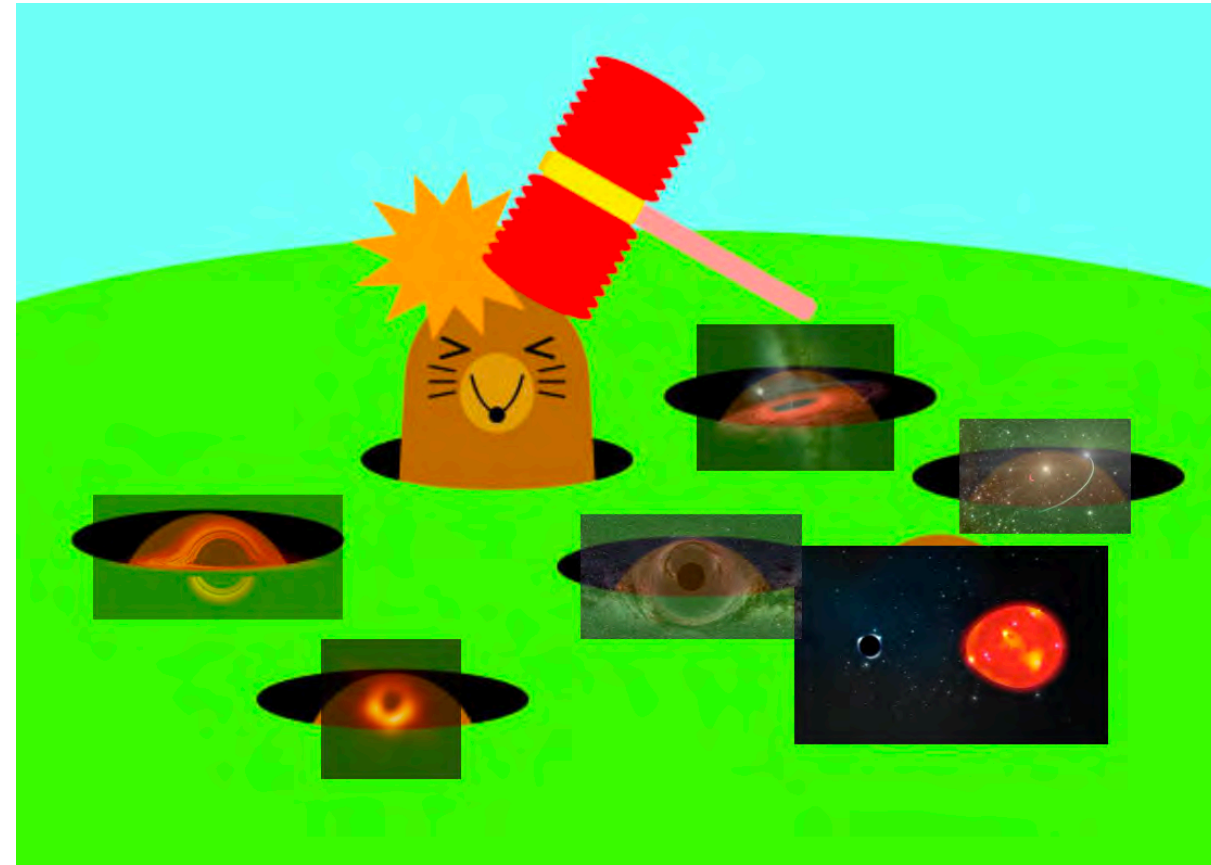




# Choose your own adventure!



Hypervelocity stars +  
Type Ia SNe



Black hole whack-a-mole



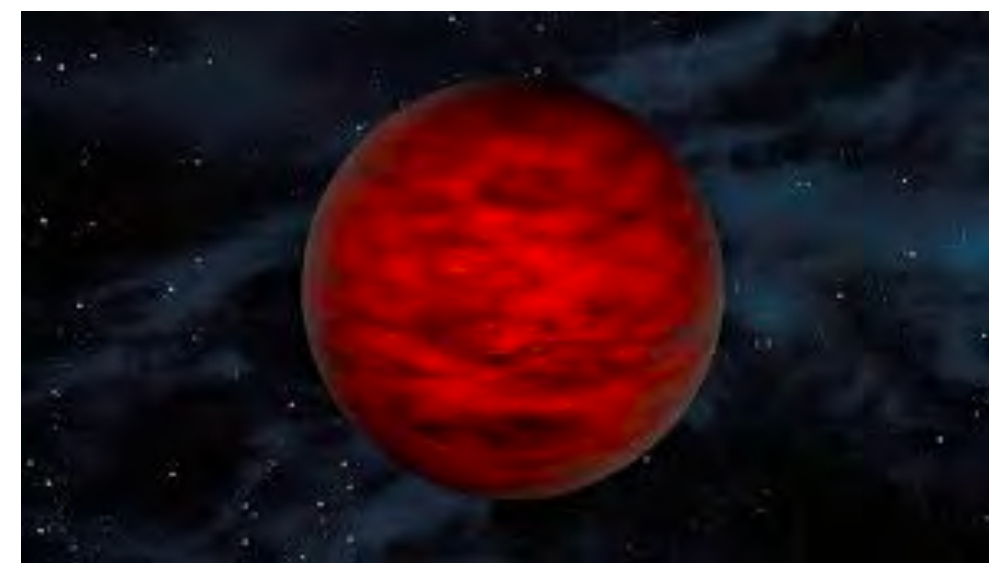
Magnetic braking



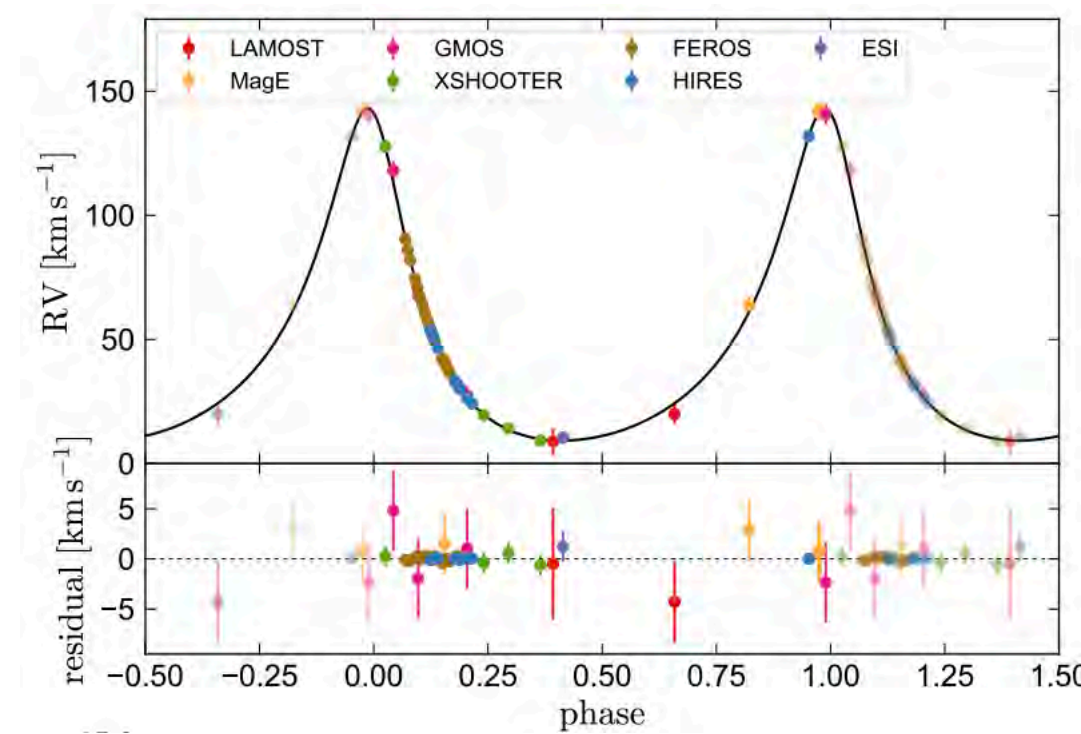
Stripped stars



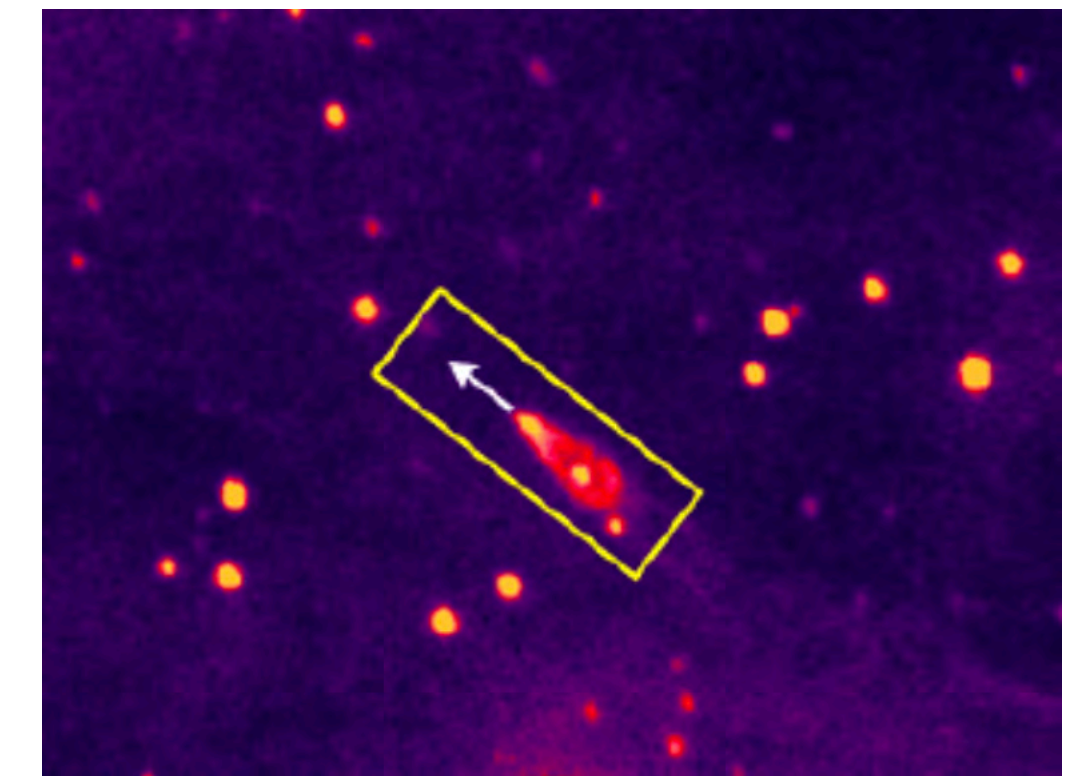
Spooky action at a distance  
in wide binaries



Compact brown  
dwarf binaries



Gaia black holes and  
neutron stars



Black hole kicks