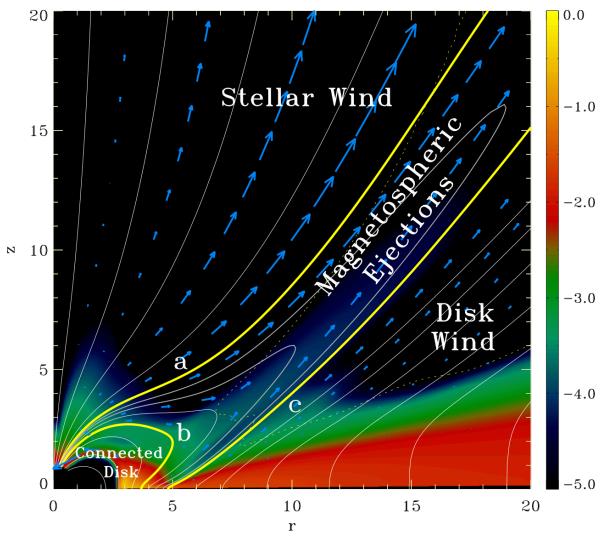
Angular Momentum Of Stars During Formation: Effect Of Accretion History on Star-Disk Interactions

Jenna Brustad Mentor: Dr. Sean Matt University of Oklahoma Physics REU June 11th, 2024

Background

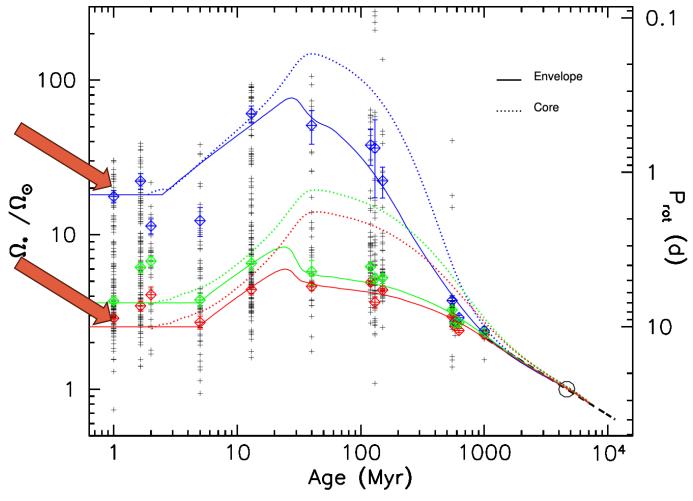
- Accretion
 - Accretion Phase
 - Accretion Disk
- First few million years
- Figure shows a star-disk interacting system
- Different environmental factors that can affect the angular momentum



Zanni & Ferreira, 2013

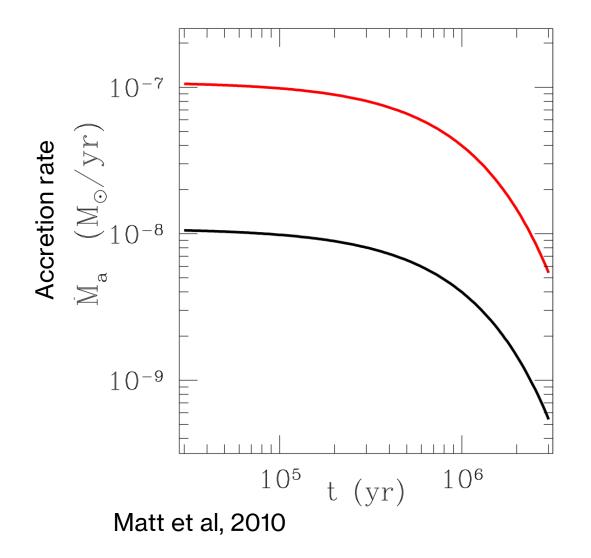
Angular Momentum evolution

- Figure shows the rotation rate and angular velocity of solar-type stars
- Blue are fast rotators, green median, and red is slow
- My project will focus on the accretion phase
 - Disk-locking



Gallet & Bouvier, 2013

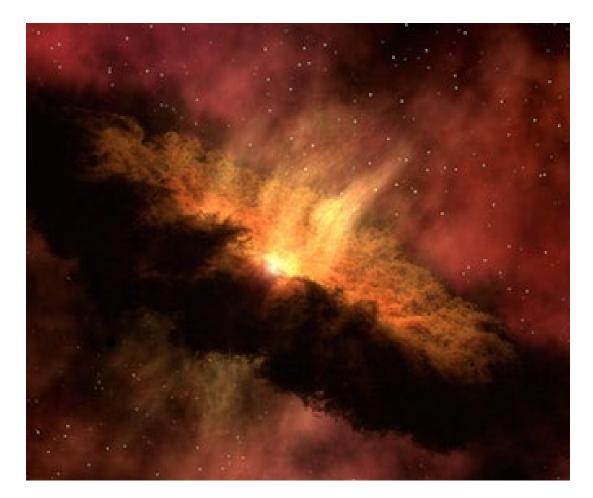
Accretion Histories



- Accretion history of solartype protostar
- Accretion rates varies from star to star

Motivation

- My Project
 - Goal for the project will be to observe the spin rates of stars, during the accretion phase
 - I will be modeling using a spin evolution code called dizzyStars
 - Why do we care about the stars rotating at certain rates?



Thank you! Questions?