# Undergraduate Research with the Astro Data Lab

M. Virginia McSwain Lehigh University





#### Astro Data Lab Advantages for Students and Faculty



User-friendly platform and science examples



Flexible interface for observational and theoretical projects



Excellent technical support from NOIRLab



Accessible anywhere via web browser



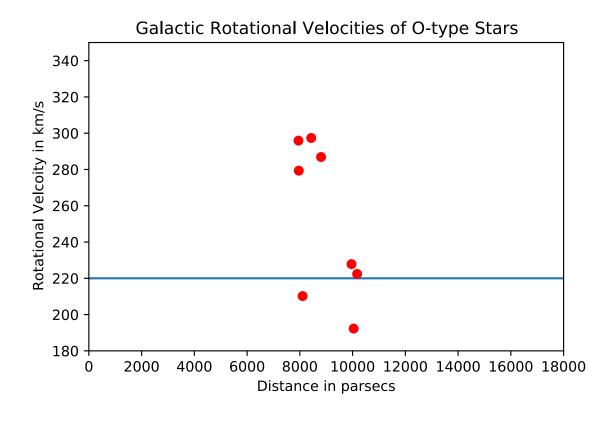
Promotes diversity and inclusivity in research



Students can continue their research after they graduate

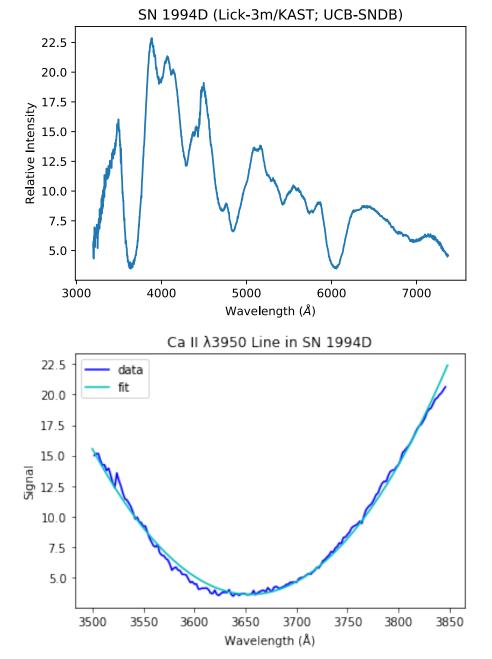
#### Investigating the Milky Way with Gaia Data of O-Type Stars

Dylan Morschl-Villa (BS Astrophysics, exp. 2023)



## Expansion Velocities of Type Ia Supernovae

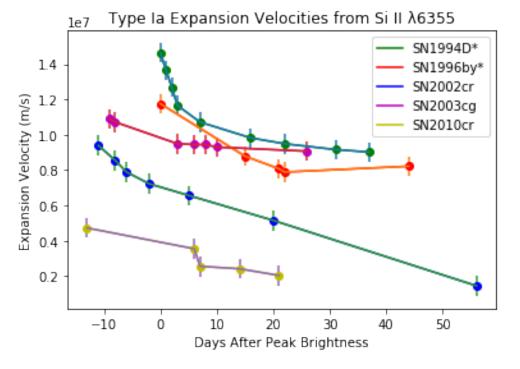
Juan Esleta (BS Astrophysics, exp. 2021)

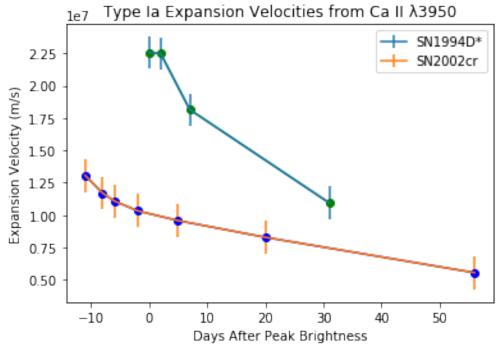


Data from WISeREP – An Interactive Supernova Data Repository (Yaron & Gal-Yam 2012, PASP, 124, 668)

## Expansion Velocities of Type Ia Supernovae

Juan Esleta (BS Astrophysics, exp. 2021)





#### Lightcurves of α2 CVn Variables

Cameron Pfeffer (BS Astrophysics, exp. 2021)

See poster 334.01

- Parameters:  $(x,y,z,i,\beta)=(0,0.3,0.3,\pi/5,\pi/5)$
- Magnetic Field Vectors
- Rotation Axis

