Modeling Supernovae Remnants
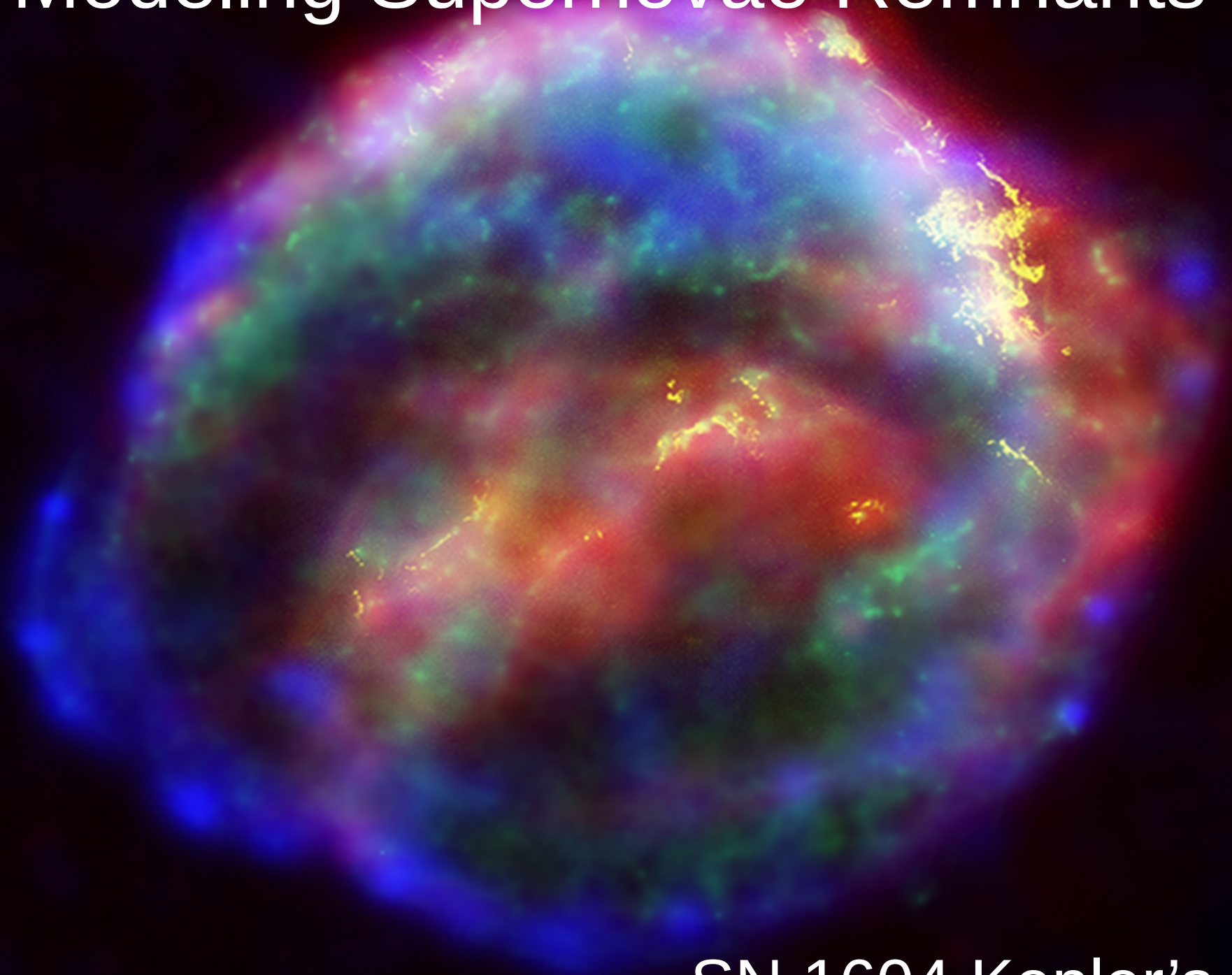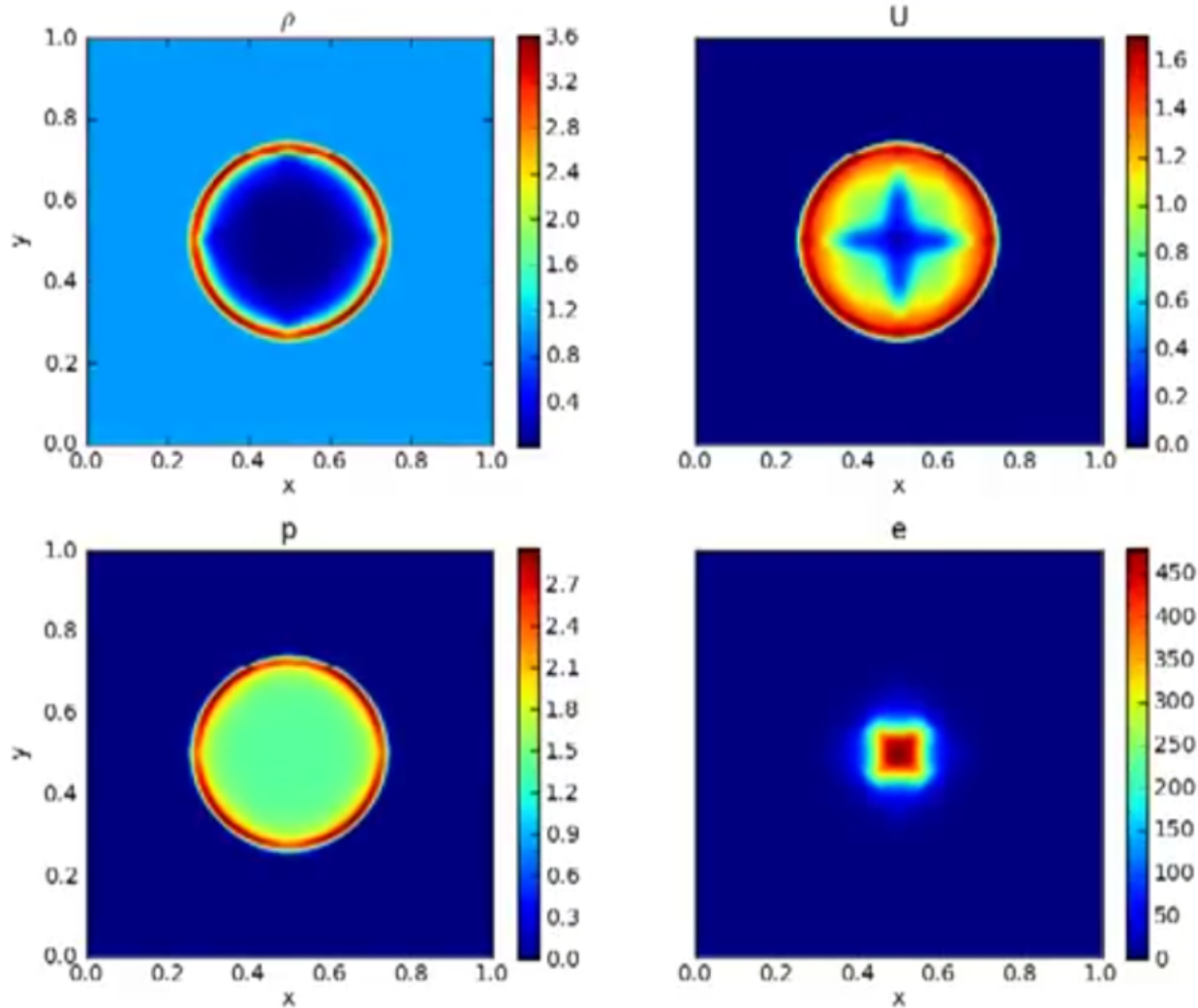
SN 1604 Kepler's SN

Cassiopeia A
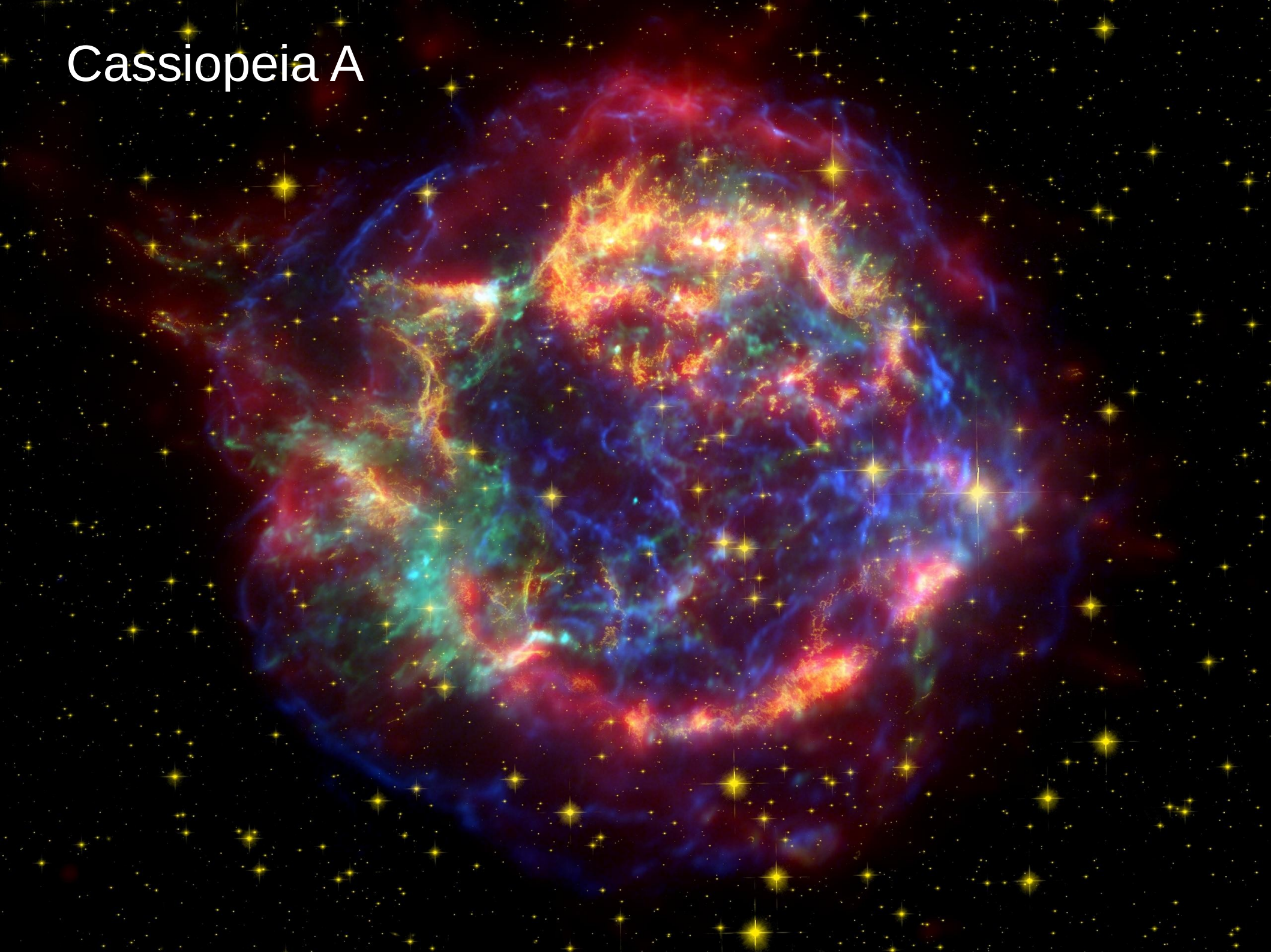
Pyro – The Sedov Explosion

https://zingale.github.io/pyro2/

Project

- Assess which supernovae remnants we can model in the Sedov-Taylor adiabatic expansion phase.

- Experiment with Pyro using different blast initial conditions to determine how best to model various supernova remnants.

- Determine how shock speed and temperature depend on initial conditions.