Outline

* Introduction
  + Who am I and what am I doing?
  + Motivate my research
  + Present my research
* Research Statement
  + Introduce the context of research
  + Present outstanding problem(s) of interest
    - Dust attenuation in important source of variation for SNe Ia and is strongly related to host galaxy property estimations. Host properties also correlate with SN Ia properties.
    - Current techniques do not separate color variation due to dust from intrinsic variation.
  + ‘Determining the Connection between Dust and the Host Bias’
    - What have I done?
      * Paper 1 – observation and fitting techniques unimportant for mass step
    - What am I going to do?
      * Focus on SFR observables that trace different star formation epochs and vary in sensitivity to dust
      * Determine how dust attenuation corrections change the sSFR and mass step bias before and after standardization using both simple and more robust dust attenuation correction models
  + ‘Separating Sources of SN Ia color Variation’
    - What have I done?
      * Preparing first paper with two color laws instead of one. The software foundation for this project is complete.
      * We have measured two different color curves, one that is inconsistent with dust
    - What am I going to do?
      * Add time variation to make it a complete SN Ia generative model
      * Make the model more robust to outliers
      * Develop a SN Ia lightcurve simulator from our model to generate simulated data sets for testing
* Undergraduate mentoring summary
* Note on dissertation progress