

“Building Virtual Galaxies”

April 29-May 1, 2010
East Lansing, MI

MICHIGAN STATE

UNIVERSITY



Logistics

- Bathrooms are outside and down the hallway to the right (as you walk out the door)
- Coffee is just past the bathrooms, to the right. There is continuous service all day. Also, continental breakfast available in that room as well.
- Lunch is in the atrium - up the stairs from where we are now.
- Slides will be put online immediately - please give yours to Brian as ppt, pdf, or Keynote (pdf preferred)

Announcements!

- Dinner tonight at the University Club: please let Brian know if you are a vegetarian or have other dietary requirements
- Nothing currently organized for tomorrow night - we'll organize car share if people want to go out

Workshop goals

- Define the JINA collaboration's role in developing GCE models in light of explosion of observational data
- What are the current theoretical, observational, and experimental limiting factors in our understanding of GCE?
- What can JINA uniquely contribute to this field?

Concrete goals

- Identify important open questions that can be addressed over the next several years
- Create “matrix” of JINA priorities for the same time frame to help focus resources
- What *specific projects* will the JINA collaboration undertake? (Either collaboratively or by individual investigators)

Some suggestions

- Need to evaluate the tools for prediction of nucleosynthesis in various sites
- SNI: understand uncertainties in simulation codes to assess reliability in sims, discrepancy between sims/obs
- Need to investigate metal mixing in supernovae, SN remnants

Some suggestions

- Detailed predictions of large numbers of elements (not just [Fe/H] and [alpha/Fe] for different components of galaxy (disk, bulge, halo), ideally from cosmological simulations
- Real predictions of theoretical uncertainties, so we know when we're observing something that can only be explained one way (IMF vs. diff. distribution of rotation rates)
- Prediction of observables as a function of distance in R_g and Z , 3D velocity (NOT in terms of things that can't be measured)