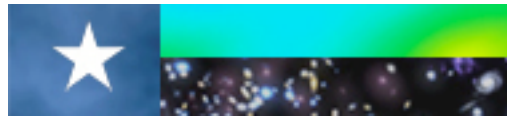


Welcome!

- This is the second Texas Cosmology Network Meeting.
- Purpose: let's talk about the latest things in cosmology.
- Oh, and by the way, networking is fun.

What's new in UT Austin since the last meeting in 2006

- Texas Cosmology Center (TCC) was established on January 1, this year.



Texas Cosmology Center (TCC)

tcc.utexas.edu

Supported generously by Dean's Office,
Provost's Office, McDonald Observatory,
Depts. of Astronomy and Physics

Participating Faculty/ Research Members

- **15** Faculty & Research Scientists from both Astronomy and Physics Dept.



Objectives

- To foster interdisciplinary collaborations between McDonald Observatory, the Departments of Astronomy and Physics, in hopes of providing answers to the **four biggest questions** about the Universe.

Four Biggest Questions

- What is the nature of Dark Energy?
- What is the nature of Dark Matter?
- What is the origin of Inflation (Big Bang)?
- How did the structure of the Universe emerge and evolve?

TCC: Basic Functions

- Getting a “critical mass”
 - Hire excellent postdoctoral researchers by providing prize fellowships
 - Two TCC Fellows (+ one McDonald fellow yet to be named)
 - Goal: 6 TCC fellows

TCC: Basic Functions

- Organize conferences and meetings
 - Inaugural “Texas Cosmology Network Meeting” on Oct 29&30
 - A conference on “First Stars & Galaxies” organized by Volker Bromm, in March
 - “Frontiers in Cosmology” Symposium late next year or early 2011
- Bring in visitors
 - TCC Distinguished Visiting Scholar Program

TCC: Basic Functions

- Disseminate Discoveries
 - Working with Sandi Preston's StarDate team to produce radio programs, as well as short videos that high school teachers can use in their classes.
 - As a first production, we will produce four radio programs and four videos on dark energy, dark matter, inflation, and structure formation.

Meeting Agenda

- Today
 - “Dark Energy and Structure Formation”
 - Special Talk by Rashid Sunyaev (1:30–2:00)
 - Poster Session (2:00–3:00)
- Tomorrow
 - “Inflation, Strings and Dark Matter”
 - Special Talk by Pierre Sikivie (1:30–2:00)
 - Meeting Adjourn at 2:20 (but let networking continue!)