



## PROGRAM AND SCHEDULE

Workshop sessions are held in the Brown-Alley Room, Weinstein Hall  
 Breakfasts and break refreshments are served on location in Weinstein Hall  
 Lunches are held in the Heilman Dining Center

### Wednesday, July 19

8:30 am Bus pick-up at Berkeley Hotel  
 9:00-9:30 am Breakfast, pick up packets

#### INTRODUCTIONS

9:30-9:35 am Jack Singal *Opening remarks*  
 9:35-9:40 am Patrice Rankine (Dean) *Welcome*

#### SESSION I – OBSERVATIONAL HISTORY (Chair: Jack Singal)

9:40-10:10 am Alan Kogut *Overview and Observational History of Isotropic Radio Signal*  
 10:10-10:40 am Dale Fixsen *ARCADE and Related Measurements*  
 10:40-11:10 am Coffee Break  
 11:10-11:40 am Jayce Dowell *The LWAI Low Frequency Sky Survey*  
 11:40am-12:10pm Discussion  
 12:10-1:30 pm Lunch

#### SESSION II – KNOWN POPULATIONS (Chair: Ken Kellermann)

1:30-2:10pm Jim Condon *The Contribution of Galaxies to the Background at 3 GHz*  
 2:10-2:40 pm David Ballantyne *The Contribution of Active Galactic Nuclei to the Excess Cosmic Radio Background at 1.4 GHz*

2:40-3:00 pm                      Discussion  
3:00-3:20 pm                      Coffee Break

SESSION III – SOME POSSIBLE POPULATIONS (Chair: Jim Condon)

3:20-4:10 pm      Tessa Vernstrom      *Diffuse Extragalactic Synchrotron Emission and the  
Radio Background*  
4:10-4:40 pm      Tim Linden              *Dark Matter, Alfven Acceleration, and the ARCADE-II  
Excess*  
4:40-5:10 pm      Benjamin Harms        *Backgrounds Due to the Formation of Supermassive  
Black Holes in the Early Universe*  
5:10-5:30 pm                      Discussion  
5:30 pm                              Bus departs for Berkeley Hotel

**Thursday, July 20**

8:30 am                              Bus pick-up at Berkeley Hotel  
9:00-9:30 am                      Breakfast

SESSION IV – LESSONS FROM OTHER WAVELENGTHS (Chair: Jack Singal)

9:30-10:00 am      (Marco Ajello)              *The Origins of the X-ray and Gamma-ray  
Backgrounds*  
10:00-10:30 am      Student Presentations  
10:30-11:00 am                      Coffee Break

SESSION V – DIFFUSE SYNCHROTRON AND COSMIC RAYS (Chair: Al Kogut)

11:00-11:30 am      Nicolao Fornengo        *The Diffuse Galactic and Extragalactic Radio  
Emission*  
11:30am-12:00 pm      Elena Orlando              *Synchrotron Radiation in the Context of Cosmic Ray  
Propagation Models*  
12:00-12:30 pm      Marco Regis              *The Diffuse Radio Emission and Dark Matter*  
12:30-2:00 pm                      Lunch  
2:00-2:30 pm                      Discussion

SESSION VI – CONSTRAINTS I (Chair: Dale Fixsen)

2:30-3:00 pm      Eric Murphy              *The Far-Infrared/Radio Correlation and Halos*  
3:00-3:30 pm                      Coffee Break  
3:30-4:00 pm      Jack Singal              *Test of Simple Galactic Origin Models*

4:00-4:30 pm Al Kogut *PIXIE: Mission Concepts and Potential RSB Constraints*  
4:30-5:00 pm Discussion  
5:30 pm Bus departs for Berkeley Hotel

## Friday, July 21

8:30 am Bus pick-up at Berkeley Hotel  
9:00-9:30 am Breakfast

### SESSION VII – RADIO BACKGROUND AS FOREGROUND (Chair: Eric Murphy)

9:30-10:30 am Raul Monsalve *Synchrotron Radiation as a Foreground to the Global Redshifted 21-cm Measurement by EDGES*  
10:30-11:00 am Coffee Break  
11:00-11:30 am Phillipp Mertsch *Galactic Radio Loops*  
11:30 am -12:00 pm Discussion  
12:00-1:00 pm Lunch

### SESSION VIII – ANISOTROPY (Chair: Ted Bunn)

1:00-2:30 pm Gil Holder *Too perfect? Where are the fluctuations?*  
1:30-2:00 pm Lenon Xu *Attempting to measure the power spectrum of radio anisotropies by quadratic estimator.*  
2:00-2:30 pm Discussion

### SESSION IX – POSSIBLE FUTURE MEASUREMENTS

2:30-3:30 pm Jim Condon *Panel and Audience Discussion of Possible Future Measurements*  
Al Kogut  
Gil Holder  
Nicolao Fornengo  
Facilitator: Ken Kellermann

(Coffee and refreshments also served)

3:30-4:00 pm Summary, Final Business  
4:30 pm Bus departs for Berkeley Hotel