

**23rd ANNUAL NEW MEXICO SYMPOSIUM  
2007 October 19**

**Oral Program**

9.00-9.05	Bob Dickman (NRAO)	Welcome
<b>Session 1</b>	Chair: Jean Eilek	
9.05-9.25	Eileen Ryan & W. Ryan (NMT/MRO)	<i>Physical characterization and follow-up studies of near-earth objects using MRO's 2.4-m telescope</i>
9.25-9.45	Steven Myers (NRAO)	<i>The Radio Synoptic Survey Telescope: a square kilometer array for hydrogen and gravity studies</i>
9.45-10.05	John Matthews & the Pierre Auger Collaboration (UNM)	<i>Evidence for correlation of the highest energy cosmic rays and extragalactic objects (AGN)</i>
10.05-10.25	Lee J Rickard (UNM)	<i>An update on the Long Wavelength Array project</i>
10.25-11.00	Coffee & Posters	[Upstairs Common Room]
<b>Session 2</b>	Chair: Claire Chandler	
11.00-11.20	Amy Mioduszewski (NRAO)	<i>Mapping nearby star forming regions: distances to young stars with the VLBA</i>
11.20-11.40	Dean Hines (SSI), F. Markwick-Kemper, S. Gallagher & J. Bouwman	<i>Dust in the wind: crystalline silicates, corundum, and periclase in PG 2112+059</i>
11.40-12.00	Gianfranco Gentile (UNM)	<i>Tidal dwarf galaxies as a test of fundamental physics</i>
12.00-12.20	Chris Churchill (NMSU)	<i>Toward solving the major problems in galaxy evolution simulations via quantitative comparison of observed and simulated gaseous haloes</i>
12.20-2.00	Lunch & Posters	

**Session 3** Chair: Frazer Owen

- 2.00-2.20 Alexey Voevodkin, K. Borozdin, X-ray properties of two optically selected fossil groups  
K. Heitmann (LANL) & C. Miler  
(NOAO)
- 2.20-2.40 Zarija Lukic (UIUC), D. Reed, Constraining cosmological parameters with galaxy cluster counts  
K. Heitmann, S. Habib (LANL)  
& P. Ricker (UIUC)
- 2.40-3.00 Wei-Hao Wang (NRAO), GOODS 850-5 — a  $z > 4$  galaxy discovered in the submillimeter?  
L. Cowie (U. Hawaii), J. van  
Saders (Rutgers), A. Barger (U.  
Wisconsin-Madison),  
J. Williams (U. Hawaii)
- 3.00-3.20 Karl Menten, C. Henkel Intermediate-redshift molecular line absorption against  
(MPIfR), C. Carilli (NRAO) the B0218+357 and PKS 1830-211 gravitational lens  
& M. Reid (CfA) systems
- 3.20-4.00 Coffee & Posters [Upstairs Common Room]

**Session 4** Chair: Lisa Young

- 4.00-4.20 Mark McKinnon (NRAO) Evidence for stochastic, generalized Faraday rotation in  
the radio emission from PSR B0329+54
- 4.20-4.40 John Singleton, A. Schmidt, Lawbreakers? electromagnetic radiation from superluminal sources: laboratory demonstrations and simulations of pulsar observational data  
J. Fasel (LANL), H. Ardavan  
(Cambridge), & A. Ardavan (Oxford)
- 4.40-5.00 Ashley Rüter(NMSU), Contribution of halo white dwarf binaries to the LISA  
K. Belczynski (NMSU/LANL), gravitational wave signal  
M. Benacquista (CGWA@UTB),  
K. Holley-Bockleemann  
(Vanderbilt)
- 5.00-5.20 Tom Vestrand, Optical observations of GRBs during the critical first  
A. Panaitescu, P. Wozniak, few minutes  
R. White & J. Wren (LANL)
- 5.30 Cocktails & Dinner [Macey Center]
- 8.00 Karl Menten JANSKY LECTURE: Tuning into the Molecular Universe