Program

Compact Stars in the QCD Phase Diagram Scientific Program

Monday, August 15, 2001

13:50	*Welcome*	Dmitri Diakonov (NORDITA)
From Neutron Stars to Quark Stars		**Chair**: Dmitri Diakonov
14:00	Neutron Star Masses, Radii and Equation of State	Henning Heiselberg (NORDITA)
15:00	Diquark properties and the TOV equations	Sverker Fredriksson (Lulea Tech.)
15:30	*Coffee Break*	
16:00	Strange star candidates in low mass X-ray binaries	Ignazio Bombaci (Pisa)
16:30	Diquarks degrees of freedom in the EOS and the compactness of compact stars	Jorge Horvath (Sao Paulo)
		Chair: Jes Madsen
09:00	From Neutron Stars to Strange Stars	Fridolin Weber (Notre Dame)
10:00	Tensor correlations and Pions in dense nuclear matter	Chris J. Pethick (Nordita)
10:30	*Coffee Break*	
11:00	The observational appearance of strange stars	Vladimir V. Usov (Weizmann Inst.)
12:00	Structure of rapidly rotating strange stars: salient differences with neutron stars	Arun V. Thampan (SISSA)
12:30	*Lunch Break*	
The QCD Phase Diagram		**Chair**: Francesco Sannino (NORDITA)
14:00	The QCD Phase Diagram and Explosive Astrophysics	Stephen D.H. Hsu (Oregon)
15:00	Crystalline Color Superconductivity in Dense Matter	Deog-Ki Hong (Pusan)

15:30	*Coffee Break*	
16:00	Effective description of QCD at high density	Roberto Casalbuoni (Firenze)
16:30	Effective Theory for QCD in the LOFF Phase	Giuseppe Nardulli (Bari)
		Chair: Roberto Casalbuoni
09:00	Color superconducting quark matter in compact stars	Mark Alford (Glasgow)
10:00	Color Superconductivity and Blinking Proto-Neutron Stars	Greg W. Carter (Stony Brook)
10:30	*Coffee Break*	
11:00	Color-flavor locking in strange stars, strangelets, and cosmic rays	Jes Madsen (Aarhus)
12:00	Confinement and domain walls in high density quark matter	Dam T. Son (Columbia)
12:30	*Lunch Break*	
		Chair: Dam T. Son (Columbia)
14:00	Introduction to effecive Lagrangians for QCD	Joseph Schechter (Syracuse)
15:00	A Colored Zoo of Quasi-particles and Light Glueballs	Francesco Sannino (NORDITA)
15:30	*Coffee Break*	
16:00	Student Session	

The Gamma Ray Burst Connection — **Chair**: Vladimir V. Usov

09:00	Gamma Ray Bursts	Tsvi Piran (Hebrew)
10:30	*Coffee Break*	
11:00	Prompt Emission and Early Afterglows of Gamma-Ray Bursts	Andrei M. Beloborodov (CITA)
12:00	Quark Stars and Color Superconductivity: A GRB connection ?	Rachid Ouyed (NORDITA)
11:30	Student Session	

12:30 Lunch Break

14:00 Discussion Panel