MAGNETIC FIELDS IN THE UNIVERSE II:
From Laboratory and Stars to the Primordial Universe
Cozumel, Mexico, January 28th to February 1st, 2008

Final Program (*Invited talk).

Sunday, January 27th		
11:00-14:00 16:30-19:00	**Registration Desk** (Sports-Bar)	
19:00 20:30	**Welcoming Cocktail (**Hotel Theatre)	
Monday, January 28th, morning session		
08:30 09:00	Conference Opening	
Observational Projects		
09:00 09:30	R. Beck	Mapping Cosmic Magnetism with LOFAR and SKA*
09:30 09:50	M. Huarte-Espinosa	The evolution of cluster magnetic fields probed by the SKA
09:50 10:10	E. Carretti	GMS: to study the Galactic magnetism out of the Galactic plane
10:10 10:40	C. Escobar	Recent results from the Auger Observatory: what can we learn from them?*
10:40 11:00	J. Aumont	Studying Magnetic fields with Planck satellite experiment
11:00 11:30	**Coffee break & posters**	
Magnetic fields in galaxies and in the Milky Way		
11:30 12:00	R. Dettmar	Magnetic Fields in Galactic Halos*
12:00 12:30	E. M. de Gouveia dal Pino	Supernova Explosions and the Triggering of Galactic Winds and Fountains*
12:30 12:50	M. Krause	Magnetic fields and star formation in spiral galaxies
13:00 16:00	**Lunch break.**	
Monday, January 28th, evening session		
Magnetic fields in Clouds and ISM Turbulence I		
16:00 16:30	S. Boldyrev	Spectra and structure of anisotropic MHD turbulence*
16:30 17:00	A. Lazarian	Basics of MHD turbulence*
17:00 17:30	**Coffee break & posters**	

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Magnetic fields in Clouds and ISM Turbulence II.		
17:30 18:00	J. Stone	Supersonic MHD turbulence and other recent applications with Athena*
18:00 18:20	N. Lemaster	Dissipation and Heating in Supersonic MHD Turbulence
18:20 18:50	D. Goncalves	Studying ISM magnetic field and turbulence regimes from polarimetric maps*
Tuesday, January 29th, morning session		
Magnetic fields in Clouds and ISM Turbulence III		
08:30 09:00	A. Esquivel	Statistics of Centroids of Velocity*
09:00 09:30	D. Pogosyan	Velocity Spectrum from Doppler-broadened Emission and Absorption Lines*
09:30 10:00	M. Opher	Unraveling the Direction of the Local Interstellar Magnetic Field: Implications for the Solar System, The ISM Turbulence and MHD Instabilities*
10:00 10:30	**Coffee break & posters**	
Magnetic fields in the Sun and the circumstellar medium		
10:30 11:00	G. García-Segura	Advances in Circumstellar Medium*
11:00 11:20	J.C. del Toro Iniesta	New results about the Quiet Sun magnetic fields
11:20 11:40	G. Guerrero	The dynamo operating in the Sun
11:40 12:10	Discussion session	
12:10 16:00	**Lunch break.**	
Tuesday, January 29th, evening session		
Basic plasma processes and cosmic rays I.		
16:00 16:30	F. Adams	Ambipolar Diffusion Revisited*
16:30 17:00	E. Vishniac	Magnetic Reconnection*
17:00 17:30	S. Prager	The effect of reconnection on global magnetic and flow structures.*
17:30 17:50	P. Koch	Magnetic Fields and Turbulences in the ICM: Large-Scale Effect and Microphysics

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17:50 18:10	Invited poster review	
18:10 19:00	**Special poster session & coffee**	
Wednesday, January 30th, morning session		
Basic plasma processes and cosmic rays II		
08:30 09:00	H. Yan	New technique of magnetic field studies using aligned atoms*
09:00 09:20	S. Berdyugina	Molecular Diagnostics of Cosmic Magnetic Fields
09:20 09:40	K. Otmianowska-Mazur	The polarized emission of edge-on galaxies against the cosmic-ray driven dynamo model
Magnetic fields and star formation I		
09:40 10:10	D. Crutcher	Magnetic Fields and Star Formation*
10:10 10:40	W. Watson	Magnetic Fields and the Polarization of Astrophysical Maser Radiation*
10:40 11:00	M. Machida	Influence of the Magnetic Field on the Formation of Population III Stars
11:00 11:30	**Coffee break & posters**	
Magnetic fields and star formation II		
11:30 12:00	M. MacLow	Magnetic Field Effects on Global Star Formation*
12:00 12:20	D. Price	Magnetic fields in star formation: from galaxies to stars
12:20 12:40	R. Hildebrand	Dust Polarization*
12:40 13:00	J. Arthur	Formation and Expansion of HII regions in turbulent magnetized molecular clouds
Free afternoon		

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Thursday, January 30th, morning session		
Magnetic fields and star formation III		
08:30 09:00	E. Vázquez-Semadeni	Cloud, Core and Star Formation. What is the role of the Magnetic Field?*
09:00 09:20	P. Hennebelle	Collapse and fragmentation of magnetized prestellar dense cores
09:20 09:40	W. Henney	Radiation-MHD simulations of photoionized globules
09:40 10:00	T. Kudoh	Three-dimensional simulations of molecular cloud fragmentation induced by ambipolar diffusion and nonlinear flows
10:00 10:30	**Discussion Session**	
10:30 11:00	**Coffee break & posters**	
Magnetic fields in compact objects, accretion disks and outflows I		
11:00 11:30	D. Galli	Magnetic breaking and decoupling in the protostellar phase. *
11:30 12:00	S. Lizano	Magnetized accretion disks,
12:00 12:30	J. Cho	Grain Alignment and Polarized Emission from Magnetized T Tauri Disks*
12:30 12:50	S. Owocki	Magnetically channeled winds and decretion disks in hot, massive stars
12:50 16:00	**Lunch break**	
Thursday, January 30th, evening session		
Magnetic fields in compact objects, accretion disks and outflows II		
16:00 16:30	F. Shu	Disk-Magnetosphere Interactions in Young Stellar Objects*
16:30 16:50	C. Zanni	Numerical modeling of magnetic star-disk interaction
16:50 17:10	S. Mohanty	X-wind accretion with multipolar stellar fields.
17:10 17:40	Y. Masada	Magnetic Phenomena in Astrophysical Compact Objects*
17:40 18:00	L. Burderi	Magnetic-driven Orbital Evolution of an Accreting Millisecond Pulsar: Witnessing the Banquet of a Hidden Black Widow.

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18:00 18:15	Invited poster review	
18:15 19:00	**Special poster session & coffee**	
20:00	**Conference dinner**	
Friday, February 1st, morning session		
Magnetic fields in compact objects, accretion disks and outflows III		
09:30 10:00	S. Cabrit	The JETSET network: Theoretical and Observational progress on the origin of YSO jets*
10:00 10:30	T. Ray	Getting to Grips with the unknown: How Important are Magnetic Fields in Outflows from Young Stars*
10:30 11:00	A. Raga	Radiative jets from variable sources*
11:00 11:30	A. Frank	Astrophysical Jets and Outflows: Experiments Real and Virtual*
11:30 12:00	**Coffee break & posters**	
Magnetic fields in clusters of galaxies and beyond I		
12:00 12:30	G. Brunetti	Particle acceleration in Galaxy Clusters*
12:30 13:00	T. Enßlin	Magnetic turbulence in galaxy clusters*
13:00 13:20	G. Piccinelli	Effect of primordial magnetic fields on the electroweak baryogenesis process
13:20 13:40	K. Dolag	Numerical simulations of clusters
13:40 15:00	**Lunch break**	
Magnetic fields in clusters of galaxies and beyond II		
15:00 15:30	M. Brueggen	Simulations of magnetic field in the universe*
15:30 15:50	S. Colafrancesco	The impact of magnetic fields on the structure and evolution of groups and clusters of galaxies
15:50 16:10	F. Miniati	Magnetic Fields in High Redshift Galaxies.
16:10 16:30	M. Brentjens	Wide field polarimetry around the Perseus cluster at 350 Mhz
16:30-17:00 Conference summary		