PROGRAM		Tuesday, Oct 30, 2018		Cosmic Dust and Magnetism
Registration				
		09:00 – 9:15	**Welcome speech by KASI President Hyung-Mok Lee**	
		Dust Properties and Dust Evolution (Chair: Charlie Telesco)		
		09:15 – 10:00	**Bruce Draine** (Keynote talk)	Electromagnetic Properties of Interstellar Dust
	09:00 – 12:00	10:00 – 10:30	**Hiroyuki Hirashita** (Invited talk-IT)	Dust evolution and growth in the interstellar medium
		10:30 – 11:00	**Coffee Break**	
		11:00 – 11:30	**Vincent Guillet (IT)**	Planck data challenge current dust models and alignment mechanism
		11:30 – 11:45	Seongjoong Kim	The Synthetic ALMA Multiband Analysis of the Dust Properties of the TW Hya Protoplanetary Disk
		11:45 – 12:00	Aleksandar Cikota	Dust along type Ia supernova sightlines
		Physics of Dust Polarization: grain alignment, scattering, and tests (Chair: Bruce Draine)		
		12:00 – 12:30	**B-G Andersson (IT)**	Observational tests of Grain Alignment by Radiative Torques
		12:30 – 14:00	**Lunch**	
	12:00 – 16:15	14:00 – 14:30	**Thiem Hoang (IT)**	A Unified Theory of Grain Alignment by Radiative Torques and Application
		14:30 – 15:00	**Dan Clemens (IT)**	Background Starlight Polarimetry in the Age of SOFIA and Gaia
		15:00 – 15:15	Robert Brauer	The radiative transfer code POLARIS
		15:15 – 15:30	Joonas Herranen	Interstellar dust dynamics across timescales from scattering to alignment
		15:30 – 16:00	**Coffee Break**	
	16:15 – 16:45	**PAH & Nanodust (Chair: TBA)**		
		16:00 – 16:30	**Charles Telesco (IT)**	Using 10μ Polarimetry at the 10m GTC to Explore Cosmic Magnetic Fields and Dust Properties
		16:30 – 17:00	**Takashi Onaka (IT)**	Formation and processing of organic and ice dust
		17:00 – 17:15	Matias Vidal Navarro	A high angular resolution study of spinning dust in NGC2023
		17:15 – 17:30	Simon Casassus	Dust radio continuum components at 1cm in protoplanetary disks
	17:30 – 18:00	**Discussion (led by Laura Fissel and Brandon Hensley)**		

Wednesday, Oct 31, 2018

	09:00 – 11:00	**PAH & Nanodust (continued) (Chair: Brandon Hensley)**			
		09:00 – 09:30	**Sun Kwok (IT)**	Organic Dust in Space	
		09:30 – 10:00	**Gazinur Galazutdinov (IT)**	On the possible detection of C60+ in the interstellar medium	
	10:00 – 12:30	**What is the role of magnetic fields on star and planet formation? (Chair: Schu-ichiro Inutsuka)**			
		10:00 – 10:30	**Chat Hull (IT)**	Star formation, polarization, and magnetic fields in the ALMA era	
		10:30 – 11:00	**Coffee Break**		
		11:00 – 11:30	**Laura Fissel (IT)**	The Formation of Dense Gas within Magnetized Molecular Clouds	
		11:30 – 12:00	**Akimasa Kataoka (IT)**	mm-wave polarization of protoplanetary disks: alignment of scattering?	
		12:00 – 12:15	Gu Qilao	Comparison between Magnetic Field Directions Inferred from *Planck* and Starlight Polarimetry	
		12:15 – 12:30	Yusuke Tsukamoto	The impact of non-ideal MHD effects on the protostar formation and their observational signatures	
	12:30 – 14:00	**Lunch**			
	14:00 – 19:00	**Excursion**			
	19:00 –	**Banquet**			

PROGRAM — Cosmic Dust and Magnetism

Thursday, Nov 1, 2018

	09:00 – 12:30	**What is the role of magnetic fields on star and planet formation (continued)? (Chair: Alex Lazarian)**			
		09:00 – 09:30	**Woojin Kwon (IT)**	Magnetic Fields of Star formation on Intermediate and Small Scales	
		09:30 – 10:00	**Shu-ichiro Inutsuka (IT)**	The Formation of Magnetized Molecular Clouds and Subsequent Star Formation	
		10:00 – 10:15	Hongli Liu	Velocity Anisotropy in Self-Gravitating Molecular Clouds	
		10:15 – 10:30	Tie Liu	A Holistic Perspective on the Dynamics of G035.39-00.33: The Interplay between Gas and Magnetic Fields	
		10:30 – 11:00	**Coffee Break**		
		11:00 – 11:30	**Christoph Federrath (IT)**	The Role of Turbulence and Magnetic Fields for Filament and Star Formation	
		11:30 – 11:45	Commercon Benoit	Disk Formation with Ambipolar Diffusion from low- to high-mass Star Formation	
		11:45 – 12:00	Aris Tritsis	The Musa Molecular Cloud: An Interstellar Symphony	
		12:00 – 12:15	Poster Flash		
		12:15 – 12:30	Conference Photo		
		12:30 – 14:00	**Lunch**		
		14:00 – 14:30	**Hangjin Jiang**	Bayesian revisit of the relationship between the total field strength and the volume density of interstellar clouds	
	14:00 – 15:45	**What can we learn from ALMA disk polarization? (Chair: Dongsu Ryu)**			
		14:30 – 15:00	**Josep Miquel Girart (IT)**	ALMA Polarization Observations from Core to Disk Scales	
		15:00 – 15:15	Satoshi Ohashi	Different Polarization Mechanisms in Protoplanetary Disks	
		15:15 – 15:30	Valentin Le Gouellec	ALMA Observations of Dust Polarization and Molecular Line Emission from the Three Class 0 Protostellar Source Serpens SMM1, Emb 8 and Emb 8(N)	
		15:30 – 15:45	Miikka Vaisalsa	Observational Signatures of Misaligned Magnetic Fields in Early Disk Formation	
		15:45 – 16:00	Nguyen Thi Phuong	Observed chemistry in the GG Tau A gas and dust: The first detection of H2 in a protoplanetary disk	
		16:00 – 16:30	**Coffee Break**		
	16:30 – 17:30	**Related important issues: turbulence, shocks, and filaments (Chair: Woojin Kwon)**			
		16:30 – 17:00	**Dongsu Ryu (IT)**	Shock Waves and their Roles in Astrophysical Turbulence	
		17:00 – 17:30	**Siyao Xu (IT)**	Particle Scattering in MHD Turbulence	
	17:30 – 18:00	**Discussion (Led by Blakelsey Burkhart)**			

PROGRAM			Cosmic Dust and Magnetism Friday, Nov 2, 2018		
	09:00 – 11:45	**Alternative ways to trace magnetic fields as a synergy dust polarization (Chair: Chat Hull)**			
		09:00 – 09:30	**Alex Lazarian (IT)**	Changing the Landscape: New Ways of Tracing and Probing Magnetic fields with Velocity and Synchrotron Gradients	
		09:30 – 9:45	Ka Ho Yuen	Gradients of Synchrotron Polarization: Tracing 3D Distribution of Magnetic Fields	
		9:45 – 10:00	Yue Hu	Surveying Magnetic Fields Morphology with Velocity Gradient Technique in Molecular Clouds	
		10:00 – 10:30	**Martin Houde (IT)**	Non-Zeeman Circular Polarization of Rotational Molecular Spectral Lines	
		10:30 – 11:00	**Coffee Break**		
		11:00 – 11:15	Ka Wai Ho	Mapping magnetization with the Velocity Gradient Technique	
		11:15 – 11:45	**Huirong Yan (IT)**	3D Magnetic Tomography with Atomic Alignment	
		11:45 – 12:00	Heshou Zhang	Identification of Magnetonsonic Modes in Galactic Turbulence with Synchrotron Polarization	
	11:45 – 15:00	**Related important issues: turbulence, shocks, and filaments (continued) (Chair: Jungyeon Cho)**			
		12:00 – 12:30	**Dinshaw Balsara (IT)**	Geodesic Mesh MHD: A New Paradigm for Computational Astrophysics and Space Physics Applied to Spherical Systems	
		12:30 – 14:00	**Lunch**		
		14:00 – 14:30	**Blakesley Burkhart (IT)**	A New Analytic Model for the Star Formation Law, from Galactic Clouds to Galaxies	
		14:30 – 15:00	**Gennady Valyavin (IT)**	Stellar magnetic fields from Main sequence to white dwarf stages: a brief review and main results	
	15:00 – 17:15	**What dust astrophysics and magnetic fields required for accurate modeling of CMB B-mode foregrounds? (Chair: B-G Andersson)**			
		15:00 – 15:30	**Brandon Hensley (IT)**	Understanding and Mitigating Polarized Dust Emission in CMB Experiments	
		15:30 – 16:00	**Andrea Braco (IT)**	Exploring helical Magnetic Fields in the ISM through Dust Polarization Power Spectra	
		16:00 – 16:30	**Coffee Break**		
		16:30 – 16:45	Debabrata Adak	Dust Polarization Modelling at Large Scale over the Northern Galactic cap using the *Planck* and EBHIS data	
		16:45 – 17:15	**Francois Boulanger (IT)**	Statistical modelling of dust polarization as a CMB foreground	
	17:15 – 17:45	**Discussion (Led by Thiem Hoang)**			
	17:45 – 18:00	**Concluding Remarks (A. Lazarian)**			

Poster List

Carla Arce-Tord

Law Chi Yan

IZUMI ENDO

Lazarian Victor

Yapeng Zhang