

Midwest Magnetic Field Meeting 2019

May 6



WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

Location: Room 226,
Pyle Center, UW Madison

KH: The video recordings of the talks will be uploaded after the conference.

Conference start at 12:30 May 6

May 7

Session Chair: John Raymond

8:00	Richard Crutcher (University of Illinois)	ALMA Observations of Magnetic Fields in Regions of Star Formations
8:25	Giles Novak (Northwestern University)	HAWC+/SOFIA results: Far-IR polarization mapping of Rho OphA at 89 and 155 microns
8:50	B-G Andersson (SOFIA/NASA)	The uses of Grain Alignment
9:15	Miranda Caputo (SOFIA Science Center/USRA)	Optical Polarization from the IRC+10216 Shell
9:30	Archana Soam (SOFIA/USRA/NASA Ames Research Center)	Dragged Magnetic Fields in An Infrared Dark Cloud G34.43+0.24

9:45 Poster Section (II)
9:50 Break

Session Chair: Giles Novak

10:15	Alex Lazarian (University of Wisconsin-Madison)	Probing Interstellar Magnetic Fields with Gradient technique
10:40	Yue Hu (University of Wisconsin-Madison)	Magnetic Field Morphology in Interstellar Cloud with Velocity Gradient Technique
11:05	Diego Gonzalez-Casanova (University of Wisconsin-Madison)	The VGT in the photo-stellar disk environment
11:30	Discussions	

May 8

Session Chair: Siyao Xu

8:20	Hui Li (Los Alamos National Laboratory)	Ion Heating in Compressible and Low-Beta Space and Astrophysical Plasmas
8:45	Fan Guo (Los Alamos National Laboratory)	Determining the Dominant Acceleration Mechanism during relativistic Magnetic Reconnection in Large Scale
9:10	Tim Waters (Los Alamos National Laboratory)	Multiphase turbulence in photoionized Plasmas
9:25	Adham El-Batal (Boston University)	Peeling Back the Magnetic Layers Towards W3(OH): Background starlight polarimetry in the age of Gaia
9:40	Poster Section (IV)	

9:45 Break

Session Chair: Sebastian Heinz

10:10	Ka Ho Yuen (University of Wisconsin-Madison)	Quest for the next generation of 3D B-field tracing technique: Are velocity channel maps dominated by velocity or density information?
10:35	Heshou Zhang (DESY/University of Potsdam)	Cosmic Compass -- First Tomography of an outer 3D sub-Gauss field via atomic alignment
11:00	Chenghan Hsieh (University of Yale)	Tracing Magnetic fields using VGT in molecular clouds
11:15	Zekun Lu (University of Alberta)	Producing Synthetic Maps of Dust Polarization using Velocity Channel Gradient Technique
11:30	Discussions	

12:00 - 13:00
Lunch served in Pyle Center

Session Chair: Richard Crutcher

12:30	Ellen Zweibel (University of Wisconsin-Madison)	Cosmic Ray Self Confinement
12:55	Tom Troland (University of Kentucky)	The Role of Magnetic Fields in H+ Region PDRs
13:20	Thiem Hoang (KASI)	Rotational Disruption of Grains by Radiative Torques and Observational Tests
13:45	Poster Section (I)	
13:50	Break	

Session Chair: Alex Lazarian

14:20	Stanislav Boldyrev (University of Wisconsin-Madison)	Runaway electrons in the solar wind
14:55	Andrey Beresnyak (Naval Research Laboratory)	Non-linear dynamo in the intracluster medium
15:20	John Raymond (Harvard-CfA)	Turbulence in a Supernova Remnant Shock
15:45	Paolo Desiati (PIDAC, University of Wisconsin-Madison)	Full sky anisotropy of 10 TeV cosmic rays as new tool for diagnostics
16:10	Discussions	

Session Chair: B-G Andersson

13:00	Farhad Yusef-Zadeh (Northwestern University)	Interacting Cosmic Ray Particles in the Galactic Center Region
13:25	Amir Jafari (John Hopkins University)	Magnetic Stochasticity, Diffusion and Reconnection
13:50	Dinshaw Balsara (University of Notre Dame)	Sub-Keplerian accretion flow studies with Geodesic Mesh MHD
14:15	Siyao Xu (University of Wisconsin-Madison)	Magnetic field amplification in weakly ionized astrophysical environments
14:40	Poster Section (III)	
14:45	Break	

Session Chair: Thiem Hoang

15:10	Nikolai Pogorelov (University of Alabama in Huntsville)	Turbulence in the Vicinity of the Heiiopause
15:35	Mateusz Ruszkowski (University of Michigan)	Cold gas precipitation in elliptical galaxy atmospheres heated by AGN cosmic rays
16:00	Nicholas Galitzki (University of California, San Diego)	Dust polarimetry of the interstellar medium with the Simons Observatory and BLAST-TNG
16:25	Vladimir Florinski (University of Alabama in Huntsville)	Magnetic fields at the heliopause
16:50	Discussions	

Session Chair: Fan Guo

13:00	Alexey Kritsuk (University of California, San Diego)	Energy Transfer in Self-gravitating MHD Turbulence
13:25	Thomas Jones (University of Minnesota)	TBD
13:50	Sebastian Heinz (University of Wisconsin-Madison)	An Update from the Wisconsin Feedback Factory
14:15	Break	

Session Chair: Amir Jafari

14:45	Eric Wilcots (University of Wisconsin-Madison)	Extragalactic Magnetic Fields
15:10	Ericson Lopez (Observatorio Astronomico de Quito)	Constraints of the magnetic field on the outskirts of spiral galaxies
15:35	Paul Williams (Northwestern University/CIERA)	Comparing Magnetic Fields on Multiple Scales in a Nearby Molecular Cloud as Measured by BLASTPol, PolKa, and ALMA
16:00	Priscilla Frisch (University of Chicago)	Very Local Interstellar Magnetic Field
16:25	Discussions	