

The 2021 Midwest Magnetic Field Workshop

Jun 14		Jun 15		Jun 16		Jun 17		Jun 18	
8:30		Thiem Hoang relation of grain alignment and grain disruption		Bing Zhang The Physical Mechanisms of Fast Radio Bursts.		Patrick Koch Multi-Scale Picture of Magnetic Field and Gravity in the High-Mass Star-Forming Region W51 e2/e8		Jungyeon Cho magnetic fields measurement	
9:00		Katia Ferrière The correct sense of Faraday rotation		Stefanie Walch Shaping the interstellar medium with magnetic fields and stellar feedback		Dana Alina Estimation of the foreground galactic polarization towards the Large Magellanic Cloud.		B-G Andersson grain alignment	
9:30	(Start at 0945) Richard Crutcher "Observations of Magnetic Fields and Star Formation"	Martin Houde Anisotropic Resonant Scattering revisited — the generation and transformation of non-Zeeman polarisation signals in molecular lines		SILCC (See Table A)		Amir Jafari 20 years of turbulent reconnection theory: history and new prediction		Huirong Yan MHD Turbulence: Simulation, Observation, Impact on particle transport	
10:00		Ka Ho Yuen Magnetized turbulence imprint in Velocity Caustics : Diagnostics of MHD turbulence from cosmology to star formation		Farhad Yusef-Zadeh High Cosmic Ray Flux and the Abundance of Magnetized Filaments in the Galactic Center Region		Grzegorz Kowal Spontaneous Magnetic Reconnection		Heshou Zhang The observation of 3D magnetic field with atomic alignment	
10:30	Alex Lazarian B-field strength from observations	Che-Yu Chen Characterizing magnetic field in star-forming regions		Martin Lemoine Particle acceleration in strong turbulence		Pradeep Chitta observations of turbulent reconnection in the sun		Siqi Zhao MHD mode composition and heating in the radial-field solar wind detected by Parker Space Probe	
11:00	Laura Fissel Polarization from Molecular clouds	Dmitri Pogosyan B-field and CMB foreground		Loukas Vlahos Formation and evolution of Current Sheets in 3D magnetic topologies in complex magnetic fields		Elisabete M. de Gouveia Dal Pino Particle Acceleration and Very High Energy Emission by Magnetic Reconnection in Relativistic Jets		Navin Sridhar Non-thermal X-rays from accreting black holes	
11:30	Glennys R Farrar Large scale magnetic field	Ralf Klessen Modeling and analysing magnetic field structure on galactic scales		Patrick Hennebelle Magnetic Fields in Accretion Disk		Fan Guo 3D PIC simulations of magnetic reconnection and particle acceleration		Dinshaw Balsara Modeling Magnetic Massive Stars in 3D: Isothermal Simulations of a magnetic O star	
12:00	Kate Pattle Polarization survey	Turlough Downes study of turbulence in weakly ionised plasmas		Luca Comisso Particle Acceleration in Magnetically Dominated Turbulence from Kinetic Particle-in-Cell Simulations		Haotao Ji Statistical Properties of Multiscale Magnetic Reconnection		Hui Li Compressible MHD Turbulence and Implications for Solar Wind Turbulent Density Variations Measured by Parker Solar Probe	
12:30	Lunch Break								
13:00	Yue Hu Obtaining the 3D magnetic field direction statistically	Marijke Haverkorn Magnetic Fields in the Milky Way: the Big Picture		John Raymond Progress in Supernova Remnant Spectroscopy: Turbulence, Cosmic Rays and Gamma-rays		Mordecai-Mark Mac Low The Small-Scale Dynamo in Supernova-Driven Interstellar Turbulence		Gianfranco Brunetti Particle acceleration in galaxy clusters and large-scale structure	
13:30	Eric Keto A turbulent-entropic instability and the fragmentation of star-forming clouds	Alejandro Esquivel anisotropy of observed structure functions		Nikolai Pogorelov Interstellar Magnetic Field Draping Around the Heliosphere		Sebastian Heinz Radio mode feedback in groups and clusters		Stefan Reissl The imprint of magnetic fields on polarization observations	
14:00	Chang-Goo Kim The role of magnetic fields in regulating star formation rates	Ashley Bransgrove Afvén waves inside and outside of neutron stars.		Siyao Xu cosmic ray propagation and acceleration		Andery Beresnyak Energy-dependent superdiffusion in nonlinear streaming instability		Maxim Y Lyutikov Coherent emission in pulsars, magnetars and FRBs	
14:30	Diego Antonio Falceta Gonçalves ISM simulations	Mikhail Medvedev Properties of magnetic monopole plasma on cosmic scales		Siming Liu Pev particle acceleration in Pulsar Wind Nebulae		Irina Zhuravleva Transport properties of magnetized intracluster medium: constraints from X-ray observations.		Priscilla Frisch interaction of heliospheric and ISM fields	
15:00	Alexey Kritsuk Energy Transfer in Isothermal Compressible Turbulence	Ka Wai Ho Local Scale Multi-Phase ISM Simulation with H_2 formation: What is the nature of HI ?		Vadim Semenov Cosmic-Ray Diffusion Suppression in Star-forming Regions Inhibits Clump Formation in Gas-rich Galaxies		Mateusz Ruszkowski non-thermal effects in the AGN feedback loop in the CGM and ICM		Ellen Zweibel Cosmic ray bottlenecks and Their Effects	
15:30	Christoph Federrath The role of magnetic fields for star formation	Contributing Talks (See Table B)		Ulrich Steinwandl The amplification of magnetic fields and its relation to outflow driving.		Reinaldo Santos de Lima Diffusion of large-scale magnetic fields by reconnection in MHD turbulence		Matthew Kunz Stretching, mixing, and tearing: High-resolution simulations of magnetic-field amplification in turbulent plasma	
Table A (10 min/talk)		SILCC			Table B (7.5 min/talk)		Contributing Talks		
Shashwata Ganguly	SILCC-Zoom: the effect of magnetic fields on the morphology, dynamics and fragmentation of molecular clouds				15:30:00	Mingrui Liu	Measuring the foreground magnetic field structures using the Velocity Gradient Technique on W44 (tentative)		
Daniel Seifried	What we learn from synthetic polarisation observations: Dynamics and dust properties of molecular clouds				15:37:30	Jiatong Wu	Gradients of Synchrotron Emission as Tracers of Interstellar Magnetic Fields		
Brandt Gaches	CRAFT (Cosmic Ray Acceleration From Turbulence) In Molecular Clouds				15:45:00	Jinming Gou	Synergy of the Velocity Gradients Technique and the Velocity Decomposition Algorithm for Tracing Magnetic Field with Self-Absorption		
				15:52:30	Enrique Omar Serrano Bernal	Near-infrared imaging polarimetric study of the pre-planetary nebula: Frosty Leo.			