

# Cosmic Magnetism in the Pre-SKA Era: Timetable

Inamori Kaikain, Kagoshima University, Japan, May 27 - 31, 2024

start	end	span	Title	Speaker	Affiliation
Day 1, Monday, 2024/5/27					
8:00	8:40	0:40	Reception open		
8:40	8:50	0:10	Welcome	Takuya Akahori	SOC chair
8:50	9:00	0:10	LOC Anouncement	Haruka Sakemi	LOC chair
Session 1: SKA and Precursor/Pathfinder Surveys : Chair ()					
9:00	9:35	0:35	SKA Observatory update and Cosmic Magenitism Data Challenge	Anna Bonaldi	Square Kilometre Array Observatory (SKAO)
9:35	9:55	0:20	How to observe your favourite source(s) with the SKA telescopes?	Sarvesh Seethapuram Sridhar	Square Kilometre Array Observatory (SKAO)
9:55	10:25	0:30	Break		
10:25	11:00	0:35	GMIMS North: Faraday Tomography Surveys at the Dominion Radio Astrophysical Observatory	Anna Ordog	Dominion Radio Astrophysical Observatory & University of British Columbia Okanagan
11:00	11:20	0:20	Early Results from the DRAGONS Faraday Depth Survey	Rebecca Booth	University of Calgary
11:20	11:40	0:20	Polarization science with the MPIfR MeerKAT Galactic Plane Survey (MMGPS)	Ancor Damas Segovia	Max Planck Institute für Radioastronomie - Bonn
11:40	12:00	0:20	The LOFAR Faraday rotation measure grid	Shane O'Sullivan	Universidad Complutense de Madrid
12:00	13:30	1:30	Lunch		
Session 1: Continued: Chair ()					
13:30	14:05	0:35	SPICE-RACS: Towards a full-sky, full-band ASKAP polarisation survey	Alec Thomson	Commonwealth Scientific and Industrial Research Organisation (CSIRO)
14:05	14:25	0:20	QUOCKA - A systematical Polarisation Survey for over 400 Radio Galaxies in the Southern Sky	Yuanqi Liu	Shanghai Astronomical Observatory, CAS
14:25	14:45	0:20	Aper-V - The Apertif Circular Polarisation Survey	Björn Adebarh	Astronomy Institute Ruhr University Bochum (AIRUB)
14:45	15:15	0:30	Break		
15:15	15:35	0:20	First results from ASKAP POSSUM - Polarisation Sky Survey of the Universe's Magnetism	George Heald	CSIRO
15:35	15:55	0:20	Building the Polarization Survey of the Future: Technical development of the POSSUM survey	Cameron Van Eck	Australian National University
15:55	16:15	0:20	Presenting prototype Faraday rotation measure catalogs of pilot observations from the Polarisation Sky Survey of the Universe's Magnetism (POSSUM)	Shannon Vanderwoude (Jennifer West)	Dunlap Institute, University of Toronto
16:15	16:35	0:20	Exploring Degeneracy in QU-Fitting with the POSSUM Survey	Lindsey Oberhelman	Australian National University
16:35	17:05	0:30	Break		

Session 2: Stars: Chair()						
17:05	17:40	0:35	TBD	Harish Vedantham		
17:40	18:00	0:20	The RAdio Magnetospheres of A, B and O Stars (RAMBO) project	Zsolt Keszthelyi	National Astronomical Observatory of Japan (NAOJ)	
Poster session: Chair()						
18:00	18:15	0:15	Poster Flash (11 posters, each 1 minute) Michael Rugel, Ayush Pandhi, Satoko Sawada-Satoh, Ala'a AL-Zetoun, Francois Boulanger, Jason Price, Sam Taziaux, Yuki Kudoh, Wenhui Jing, Timea Kovacs, Shinsuke Ideguchi			
18:15	19:15	1:00	Welcome Drink Party			
Day 2, Tuesday, 2024/5/28						
8:00	8:50	0:50	Reception open			
8:50	9:00	0:10	LOC Anouncement	Haruka Sakemi	LOC chair	
Session 3: ISM : Chair ()						
9:00	9:35	0:35	Magnetic Fields in the Dense Interstellar Medium in the SKA Era	Thushara Pilai	MIT Haystack Observatory	
9:35	9:55	0:20	Modeling Galactic Synchrotron Absorption Measurements in the HII region behind the Galactic center	Ala'a AL-Zetoun	Khalifa University	
9:55	10:15	0:20	Magnetic fields in the multiphase ISM	Amit Seta	Australian National University	
10:15	10:35	0:20	Advancing Cosmic-Ray Modeling to Illuminate the Magnetized and Multiphase Galaxy	Andrea Bracco	INAF - Osservatorio Astrofisico di Arcetri (IT)	
10:35	11:05	0:30	Break			
11:05	11:25	0:20	Faraday tomography of LoTSS-DR2 data - Revealing the Local Bubble	Ana Erceg	Ruder Boskovic Institute, Zagreb, Croatia	
11:25	11:45	0:20	Optical starlight polarimetry to probe the magnetized, turbulent interstellar medium	Yenifer Angarita Arenas	Radboud University	
11:45	12:05	0:20	Novel techniques in the SKA Era: Mapping the Complete Interstellar 3D Magnetic Fields	Mehrnoosh Tahani	Stanford University	
12:05	12:25	0:20	Galactic structure seen through the small-scale magnetic field	Jeroen Stil	University of Calgary	
12:25	13:55	1:30	Lunch			
Session 3: Continued : Chair ()						
13:55	14:30	0:35	Magnetic Fields in the Milky Way on the path to SKA	Marijke Haverkorn	Radboud University	
14:30	14:50	0:20	Probing Galactic Magnetic Fields using Polarisation Observations of Pulsars	Charlotte Sobey	Square Kilometre Array Observatory (SKAO) & Commonwealth Scientific and Industrial Research Organisation (CSIRO)	
14:50	15:10	0:20	Extreme Faraday Complexity Observed in Polarised Extragalactic Radio Sources on the Galactic Plane	Yik Ki (Jackie) Ma	Australian National University	
15:10	15:30	0:20	Explore Galactic diffuse polarized emission: from low to high frequency	Xiaohui Sun	Yunnan University	
15:30	15:50	0:20	Exploring the Galactic latitude dependence of Faraday complexity in the SPASS/ATCA RM catalogue	Shilpa Ranchod	Max Planck Institute for Radio Astronomy	

15:50	16:20	0:30	Break		
Session 4: Galaxies : Chair ()					
16:20	16:55	0:35	Magnetic fields in the Magellanic System	Naomi MacClure-Griffiths	Australian National University
16:55	17:15	0:20	Search for magnetized circumgalactic clouds using Faraday rotation	Lyla Jung	University of Oxford
17:15	17:35	0:20	Modelling magnetic field of M31 using radio observations	Tuhin Ghosh	NISER Bhubaneswar
17:35	17:55	0:20	Exploring magnetised galactic outflows in dwarf galaxies	Sam Taziaux	Ruhr Universität Bochum
Day 3, Wednesday, 2024/5/29					
8:00	8:50	0:50	Reception open		
8:50	9:00	0:10	LOC Anouncement	Haruka Sakemi	LOC chair
Session 4: Continued : Chair ()					
9:00	9:35	0:35	Magnetic field structure of nearby galaxies	Hiroyuki Nakanishi	Kagoshima University
9:35	9:55	0:20	Saturation mechanism of Fluctuation dynamos and insights from the morphology of structures in polarized synchrotron emission	Sharanya Sur	Indian Institute of Astrophysics
9:55	10:15	0:20	Detecting the magnetic field of two lensing galaxies at $z = 0.414$ and $z = 0.685$	Timea Kovacs	MPIA
10:15	10:45	0:30	Break		
Session 5: AGN and Radio Galaxies : Chair ()					
10:45	11:20	0:35	AGNs and Radio Galaxies: Insights and Future Prospects with the SKA	Lerato Baidoo	University of Toronto, Canada
11:20	11:40	0:20	The Spatial and Temporal Evolution of Faraday Rotation in AGN jets	Jack Livingston	Max Planck Institute for Radio Astronomy (MPIfR)
11:40	12:00	0:20	AGN-Starburst composites in radio frequencies	Crystal Mele	Astronomy Institute Ruhr University Bochum (AIRUB)
12:00	13:30	1:30	Lunch + Move to Kagoshima-Chuo Station		
13:30	18:00	4:30	Excursion		
Day 4, Thursday, 2024/5/30					
8:00	8:50	0:50	Reception open		
8:50	9:00	0:10	LOC Anouncement	Haruka Sakemi	LOC chair
Session 5: Continue : Chair ()					
9:00	9:20	0:20	Revealing Faraday structures local to the radio source	Lawrence Rudnick (online)	University of Minnesota
9:20	9:40	0:20	Polarization analysis of a head-tail radio galaxy MRC 0600-399	Haruka Sakemi	Kagoshima University
9:40	10:00	0:20	Exploring the RM and Faraday complexity in Radio lobes.	Jaswanth Subramanyam	Max Planck Institute for Radio Astronomy, Bonn
10:00	10:20	0:20	Unveiling the Structure of Radio Lobes and Their Environments using Ultra-broadband Radio Polarimetry	Sarah Bradbury	Australian National University
10:20	10:40	0:20	Radio observation of AGN jets from the central cD galaxy of Phoenix Galaxy Cluster which is in the catastrophic evolution phase	Aika Oki	University of Tokyo / National Astronomical Observatory of Japan (NAOJ)

10:40	11:10	0:30	Break		
Session 6: Galaxy Clusters and Filaments : Chair ()					
11:10	11:45	0:35	Turbulence Dynamo as the Origin of Magnetic Fields in Clusters of Galaxies	Dongsu Ryu	Ulsan National Institute of Science and Technology (UNIST)
11:45	12:05	0:20	Discovery of diffuse radio emission in two galaxy clusters	Kohei Kurahara	National Astronomical Observatory of Japan (NAOJ)
12:05	12:25	0:20	The nature of the magnetic field in galaxy clusters that is yet to be understood	Takuya Akahori	National Astronomical Observatory of Japan (NAOJ)
12:25	13:55	1:30	Lunch		
Session 6: Continued : Chair ()					
13:55	14:30	0:35	Galaxy clusters physics with SKA	Francesca Loi	INAF-OAC
14:30	14:50	0:20	Probing cluster magnetic fields via radio source depolarisation and background rotation measures	Erik Osinga	Dunlap Institute for Astronomy and Astrophysics
14:50	15:10	0:20	Probing intracluster magnetic fields using radio depolarization	Alvina On	National Center for Theoretical Sciences
15:10	15:30	0:20	Magnetic fields in galaxy clusters unveiled by joining polarization and gradient techniques	Chiara Stuardi (online)	INAF - Istituto di Radioastronomia
15:30	16:00	0:30	Break		
16:00	16:20	0:20	Magnetic fields in the outskirts of galaxy clusters: New results from MACS0717+3745 and the Toothbrush	Matthias Hoeft	Thüringer Landessternwarte
16:20	16:40	0:20	Probing the magnetic field at the cluster virial radius with volume-filling radio emission	Andrea Botteon	INAF-IRA
16:40	17:00	0:20	Pervasive Magnetised Gas Around Galaxy Groups Revealed With POSSUM	Craig Anderson	Australian National University
17:00	18:30	1:30	Move to the banquet venue		
18:30	20:30	2:00	Banquet		
Day 5, Friday, 2024/5/31					
8:00	8:50	0:50	Reception open		
8:50	9:00	0:10	LOC Anouncement	Haruka Sakemi	LOC chair
Session 6: Continued : Chair ()					
9:00	9:35	0:35	TBD	Kazuhiro Nakazawa	Nagoya University
9:35	9:55	0:20	Is Abell 3667 an offset merger?	Yuki Omiya	Nagoya University
9:55	10:15	0:20	Properties of the Intracluster Medium around Northwest Relic in Abell 3667	Daisuke Ito	Nagoya University
10:15	10:45	0:30	Break		
Session 7: Cosmology and Lensing : Chair ()					
10:45	11:20	0:35	TBD	Simona Vegetti	
11:20	11:40	0:20	TNG50 cosmological simulations: Mean magnetic field–dynamical mass relation in central disc galaxies	Fatemeh Tabatabaei (online)	Institute for Research in Fundamental Sciences
11:40	12:00	0:20	Galactic magnetic fields and scaling relations: a theoretical perspective	Luke Chamandy	National Institute of Science Education and Research

12:00	13:30	1:30	Lunch		
Session 7: Continued : Chair ()					
13:30	13:50	0:20	Understanding the radio luminosity function of star-forming galaxies and its cosmological evolution	Charles Jose	Department of Physics, CUSAT, Kerala, India
13:50	14:10	0:20	Deciphering Cosmic Magnetism: Magnetic Helicity Measurements through Radio Polarisation	Jennifer Yik Ham Chan	Canadian Institute for Theoretical Astrophysics (CITA)
14:10	14:30	0:20	Lensing over Frequency and Time (LoFT): First results from broad-band high-frequency monitoring of lensed quasars	John McKean	Kapteyn Astronomical Institute / SARAO / University of Pretoria
14:30	15:00	0:30	Break		
Session 8: Transients and Cosmic Rays : Chair ()					
15:00	15:35	0:35	Widefield Time-Domain Spectropolarimetry of the Radio Sky	Bryan Gaensler	University of California Santa Cruz
15:35	15:55	0:20	Insights into fast radio burst origins from their polarization properties using CHIME/FRB	Ayush Pandhi	University of Toronto
15:55	16:15	0:20	Cosmic magnetism and its effects on the observed properties of ultra high-energy cosmic rays	Ellis Owen	Osaka University
16:15	16:35	0:20	The importance of cosmic magnetic fields in the interpretation of ultrahigh-energy cosmic ray observations	Ryo Higuchi	RIKEN
16:35	16:50	0:15	Short Break		
Session 9: Discussion : Chair ()					
16:50	17:20	0:30	Discussion		
17:20	17:40	0:20	Concluding Remarks (Best oral and poster awards)		

List of Poster Presentations					
P01			THOR-GC: An extension of THOR to the Galactic Center	Michael Rugel	
P02			Understanding the role of magnetic fields in star formation by combining radio continuum, spectral line, and polarimetric observations	Ayush Pandhi	
P03			Conversion of mixed-polarization VLBI visibilities in the pre-SKA era	Satoko Sawada-Satoh	
P04			Constraints on extragalactic magnetic fields from ultrahigh-energy cosmic rays	Ala'a AL-Zetoun	
P05			Associating LOFAR Galactic Faraday structures with the warm neutral medium	Francois Boulanger	
P06			Depolarisation and Faraday Complexity in the SMC with POSSUM	Jason Price	
P07			Exploring magnetised galactic outflows in dwarf galaxies	Sam Taziaux	
P08			Development of radiation transfer code from ionized gas and dust based on simulation data	Yuki Kudoh	
P09			The Local Group L Band Survey: Magnetic fields in our nearest neighbours	Timea Kovacs	
P10			ASKAP discovery of a new pulsar wind nebular - supernova remnant system	Wenhui Jing	
P11			Studying Faraday cubes with deep learning	Shinsuke Ideguchi	