

Wednesday 11 JUNE

Morning

- 08:45 Welcome
09:15 Introductory words
09:30 A brief history of the PRE series of workshops

SUN & HELIOSPHERE (Chairs : D. Morosan, C. Briand)

09:45 I. Jebaraj (invited)

[25+5'] A Golden Age for Solar Radio Science Below the Cutoff: Discoveries from Parker Solar Probe and Solar Orbiter

10:15 C. Krafft

[12+3'] wave radiation in turbulent magnetized and inhomogeneous plasmas : theory and simulations

10:30 P Theptong

Characterization of Fluctuations in Solar Type III Radio Spectra Observed by PSP and SolO

10:45 Break

11:15 K Deshpande

First imaging evidence of fundamental-harmonic type III radio burst pair in the interplanetary space

11:30 C. Briand

Decameter spikes to diagnose the solar corona

11:45 D. Morosan

Resolving spatial and temporal shock structures using LOFAR observations of type II radio bursts

12:00 S. Normo

Investigating the origins of three acceleration episodes during a weak solar eruption accompanied by type II radio bursts

12:15 A. Koval

Radio observations of spectral cleaving feature in solar type II bursts

12:30 K. Bandari

Comprehensive study of type II radio bursts and the properties of the associated shock waves

12:45 Lunch

Afternoon

13:45 E. Hudisic

Modelling Gyrosynchrotron Emission from Energetic Electrons in CME Flux Ropes

14:00 O. Ulyanov

Diagnostics of the solar wind using pulsars radio emission

14:15 K. Pesini

Solar Radio Burst Tracker – A Citizen Science Campaign for Identifying Type III Solar Radio Bursts

14:30 V. Krupar (remote)

Exploring Interplanetary Type III Radio Bursts as Proxies for Flare-Site Reconnection

JUPITER (Chairs : M. Imai, Y. Martos)

14:45 W. Kurth (invited, remote)

[25+5'] Jupiter Radio Emissions from Juno and Support Observations

15:15 H. Jacôme (remote)

[12+3'] Variation in Jovian Decametric radio emissions' characteristics due to Earth's declination changes

15:30 Break

POSTERS (Chair : C. Louis)

16:30 Lightning poster session (1 slide/1' each)

17:00 Poster session

18:30 Team picture and cocktail/Ice breaker

Thursday 12 JUNE

Morning

JUPITER (Chairs : M. Imai, Y. Martos)

09:00 D. Santos-Costa

[12+3'] Addressing the complexity of Jupiter's radio spectrum from multi-interferometric observations at 0.05-10 GHz

09:15 J. Girard

Detecting the Jovian synchrotron emission at very low frequencies using NenuFAR

09:30 S. Ye

Unveiling Magnetospheric Dynamics of Giant Planets: Recent Insights from Radio Emission and Magnetic Field Perturbation Studies

09:45 Y. Martos

Jupiter's magnetic field and its relation with generation and control of decameter radiation observed by Juno

10:00 M. Imai

Jupiter's Io-related radio fine structures as observed from Juno

10:15 B. Collet

In situ analysis of Jupiter's broadband kilometric auroral radio emissions with Juno

10:30 A. Boudouma

Propagation mode and sources location of the Jovian narrowband radiations from 3D numerical modeling of Juno/Waves observations

10:45 Break

EARTH AND SATURN (Chair : D. Pisa)

11:15 J. Waters

[12+3'] AKR Observations From All Local Times Indicate Substorm Activity

11:30 A. Fogg

Diurnal periodicity in Earth's radio emissions

11:45 P. Teyssere

Ionospheric D-region temporal response to solar forcing

12:00 U. Taubenschuss

Direction finding for Saturn Drifting Burst emissions

12:15 G. Fischer

Partial polarization and propagation of Saturn kilometric radiation at low and very low frequencies

12:30 A. Lecacheux

Saturnian Kilometric Radiation properties from Cassini's "Grande Finale"

12:45 Lunch

Afternoon

SOCIAL EVENT

14:30-23:00 Visit of Marseille + Conference dinner (departure from and return to the Vieux Port)



FRIDAY 13 JUNE

Morning

INSTRUMENTATION (Chair : U. Taubenschuss)

09:00 P. Zarka (invited)

[25+5'] Ground-based perspective of PRE radioastronomy, from historical observations to modern giant facilities

09:30 J.-E. Wahlund (invited)

[25+5'] The Radio & Plasma Wave Investigation (RPWI) for the JUpiter ICy moons Explorer (JUICE)

10:00 E. Rouillé

[12+3'] Observation of low-frequency planetary radio emissions with an orbiting interferometer

10:15 B. Cecconi

EXTRACT/TASKA: towards a digital computing platform for modern radio astronomy

10:30 E. Mauduit

Real-time detection of Solar and Jovian radio bursts with NenuFAR: advancing astrophysical data mining with the EXTRACT project

10:45 Break

SPACE WEATHER (Chair : J. Waters)

11:15 J. Magdalenic (invited)

[25+5'] Recents advances on solar radio monitoring and space weather

11:45 M. Bröse

[12+3'] Ground-based radio observations of space weather events with optimized CALLISTO stations

12:00 M. Knapp

The Space Weather Impacts on Planetary Emissions (SWIPE) mission concept: an observatory for Solar System radio aurorae

12:15 M. Rutala (remote)

Forecasting the Outer Heliosphere Solar Wind using Gas Giant Radio Aurorae

12:30 Lunch

Afternoon

EXOPLANETS, BROWN DWARVES AND STARS (Chairs : G. Fischer, J. Turner)

13:30 M. Kao (invited)

[25+5'] Radio Emission as a Tool for Studies of Ultracool Dwarfs and Star-Planet Interactions

14:00 J. B. C. Oliver

[12+3'] A new window into cool dwarf's magnetospheres: radiation belts and beyond

14:15 R. Kavanagh

An ultracool bridge to exoplanet magnetic fields

14:30 C.-M. Cordun

Expanding the search of radio exoplanets with LOFAR

14:45 L. Peña-Moñino

Exploring Habitability and Radio Emission in Proxima b's Space Weather Environment

15:00 X. Zhang

Probing Exoplanetary Magnetospheres at Low Radio Frequencies with NenuFAR

15:15 Break

15:45 J. Turner

Extensive follow-up observations of the Tau Bootis exoplanetary system with NenuFAR

16:00 P. Zarka

Location and energy of electrons producing the radio bursts from AD Leo observed by FAST in December 2021

16:15 C. Louis

Methods and results of low-frequency beamformed exoplanet detection studies with NenuFAR

16:30 Q. Duchêne

Improving exoplanetary radio emissions predictions using stellar magnetic field measurements' compilation and inference

16:45 M. Perez-Torres (remote)

SIRIO: A public open Python code to predict radio emission from star-planet interaction

17:00 The PREX SOC Concluding words and next PRE

LIST OF POSTERS

EARTH

- E1 S. Wu et al., Aurora Kilometric Radiation and Aurora: Observations from Polar
- E2 S. Wu et al., Radio emissions reveal Alfvénic activity and electron acceleration prior to substorm onset
- E3 S. Wu et al., Spatial distribution and plasmaspheric ducting of auroral kilometric radiation revealed by Wind, Polar and Arase
- E4 S. Walker et al., Properties of Auroral Kilometric Radiation

SATURN

- S1 B. Collet & L. Lamy, A reanalysis of Cassini's SKR source crossings
- S2 C. Jackman et al., Low Frequency Extensions of Cyclotron Maser Instability-Generated Radio Emission: A Statistical View of Low Frequency Extensions from Cassini at Saturn
- S3 R. Desmont et al., Statistical study of the Saturnian Kilometric Radiations (SKR) from Cassini's observations
- S4 D. Pisa et al., Tracing Source Regions of Saturn Drifting Bursts

JUPITER

- J1 G. Fischer et al., Influence of the Galilean moons on Jupiter's broadband kilometric radiation
- J2 C. Louis et al., Do Galilean moons influence Jovian radio emissions in the kilometer range ?
- J3 C. Louis et al., Study of the Evolution of the Periodicity of Jovian Decametric Emissions Over 30 Years Using Data from the Nançay Decameter Array
- J4 A. Boudouma et al., Geometrical and Local-Time Distribution of Broadband Kilometric Radiation from the Extended Juno/Waves Catalog of Jovian Radio Emissions
- J5 H. Kita et al., Results from a 2024-2025 Observation campaign of Jupiter's radiation belts using GMRT and single dish telescopes
- J6 O. Smirnov, M. Ivchenko et al., MeerKAT observations of Jupiter
- J7 P. Garnier et al., Statistical analysis of Jovian decametric radio emissions occurrence drivers
- J8 G. Litvinenko et al., Study of unusual spectral features on multi-scale spectra of the Jovian decameter emission
- J9 C. Fournier et al., Extensive study of Jovian decametric fine structures with the Nançay Decameter Array
- JUV1 B. Benmahi et al., Probing the 3D structure of Jovian auroras using Juno-UVS observations
- JUV2 S. Satoh et al., Plasma conditions at the orbits of Io, Europa, and Ganymede derived from the lead angle of the satellite auroral footprints observed by Juno-UVS
- JUV3 V. Hue et al., Refining Equatorial Lead Angles of Jupiter's Moons using Juno-UVS
- JUV4 C. Pit et al., Probing the energy of Jovian auroral electrons with HST/STIS through the brightness ratio method

SOLAR

- Sol1 I. Jebaraj et al., A Weakly Turbulent and Intermittent Plasma: Insights from Parker Solar Probe

SPACE WEATHER

- SW1 A. Stanislavsky et al., NenuFAR Observations of Scintillation During High Solar Activity

EXOPLANETS, BROWN DWARVES AND STARS

- E1 H. Kita et al., Attempts to detect auroral radio emissions from Beta Pictoris b using the ionospheric correction pipeline
- E2 A. Satyagraha et al., Development of Analytical Model Generalized for Exoplanetary Auroral Radio Emission
- E3 L. Lamy & P. Zarka, Search for exoplanets at radio wavelengths : validity of predictions
- E4 L. Lamy et al., A wideband search for nearby Star-Planet systems and Ultracool dwarves with FAST, NenuFAR and the NRT
- E5 L. Peña-Moñino et al., Exploring Magnetic Star-Planet Interactions in GJ 486 Using Radio Observations

INSTRUMENTATION

- I1 O. Ulyanov et al., Usage of the Solar Energy for the Solar Radio Observations with Mobile Antenna Array
- I2 J. Girard et al., Automated reduction of Solar, planetary and transient interferometric data with the EXTRACT workflow orchestration tool

- 13 E. Rouillé et al., OASyS: A Simulation Framework for Orbiting Low-Frequency Radio Interferometers
- 14 E. Rouillé et al., Autonomous Attitude Determination on a Radio Interferometric Swarm
- 15 M. Imai et al., Compact Low-Frequency Radio Observatory LWA-Niyodo in Japan
- 16 S. Aicardi & B. Cecconi, Deep learning on jovian decametric emissions
- 17 B. Cecconi et al., MASER: an Astronomy Open Science Pilot within the OSTrails project
- 18 H. Kita et al., Low-frequency VLBI observation with Iitate, Zao, and Toyokawa observatory
- 19 Y. Kasaba et al., Radio instrument of Radio and Plasma Wave Instruments (RPWI) aboard ESA JUICE: from the Launch (2023), via the Lunar-Earth flyby (2024), toward Venus (2025)

