## **Session Program**

2-5 Oct 2023



## 20th European Fusion Theory Conference 2-5 October 2023, Padova - Italy

Poster session: 01

Caffè Pedrocchi, Sala Rossini Piazzetta Cappellato Pedrocchi, 17, Padova GPS: 45.4076321 N, 11.8772911 E

## **Tuesday 3 October**

16:00

Poster session: 01: P1

Session

Location: Caffè Pedrocchi, Sala Egizia, Piazzetta Cappellato Pedrocchi, 17, Padova GPS: 45.4076321 N, 11.8772911 E

16:00-16:04

New solution to Airy's equation for describing electromagnetic beams near turning points

Speaker

Nicolas Lopez

16:04-16:08

Towards Robust Numerical Solvers for Nuclear Fusion Simulations Using JOREK: A Numerical Analysis Perspective

Speaker

Vandana Dwarka

16:08-16:12

Advanced modelling of heavy impurity tokamak transport in rotating 3D magnetic fields

Speaker

Joachim Jacques Koerfer

16:12-16:16

Linear and nolinear analysis of magnetic reconnection driven by a runaway current

Speaker

daniela grasso

16:20-16:24

Simulation of electromagnetic effects in boundary turbulence with the GBS code

16:24-16:28 Piecewise field-aligned finite element method in particle simulations

Speaker

Brenno Jason Sanzio Peter De Lucca

Speaker

Lu Zhixin

16:28-16:32

The role of plasma flow on quasi-helical states in reversed-field pinches

Speaker

Dr Marco Veranda

16:32-16:36

First Attempt to Describe Ponderomotive Effects in front of an ICRH launcher using HFSS

Speaker

Vincent Maquet

16:36-16:40

Toward the implementation of the full-f nonlinear Coulomb collision operator with the gyromoment approach

**Speaker** 

Samuel Ernst

16:40-16:44

Pitch Angle Averaged Quasi-Linear Operator for ICRH

Speaker

Lukas Bähner

16:44-16:48

**Neural Network for Magnetohydrodynamic Simulations** 

**Speaker** 

Yen Chen Chen

16:48-16:52 Magnetic Structure of Turbulence-Driven Magnetic Islands

Speaker

Nicolas DUBUIT

16:52-16:56

Analysis of Impurity Clustering in the Edge Plasma of Tokamaks

Speaker

Zetao Lin

16:56-17:00

Characterization of L-H transition density branches in JET D-T plasmas through a power balance analysis

Speaker

Pietro Vincenzi

17:04-17:08

Parametric Decay Instabilities in Electron Cyclotron Wall Conditioning: **Comparison Between Models and Experiments** 

Speaker

Riccardo Ragona

17:08-17:12

An efficient conservative solver for plasma transport equations in tokamaks

Speaker

Dr Andrei Ludvig-Osipov

17:12-17:16

Optimal modes of gyrokinetic free energy growth with trapped electrons

Speaker

Paul Costello

17:16-17:20

3D boundary flow impact in modelling free-boundary instabilities with resistiveshell-based boundary conditions in the nonlinear MHD code SPECYL

Speaker

luca spinicci

17:20-17:24

Gyrokinetic Simulations of JET Pedestal Top Plasmas in Different Regimes

Speaker

Mattia DICORATO

17:24-17:28

Beam-tracing analysis of EC-assisted breakdown and high-frequency core heating in various DEMO scenarios

Speaker

Prof. Christos Tsironis

17:28-17:32

Viscosity profile studies in 3D non-linear MHD modeling of RFP fusion plasmas

Speaker

Nicholas Vivenzi

17:32-17:36

ReMKiT1D - A novel framework for building 1D reactive multi-fluid models of the Scrape-Off Layer with kinetic electrons

Speaker

Stefan Mijin

17:36-17:40 Hybrid kinetic-MHD simulations of the fishbone instability with JOREK

Speaker

Felix Antlitz

17:40-17:44

Alfvénic instability and critical balance in ion-scale electromagnetic turbulence driven by electron temperature gradient

Speaker

Will Clarke

17:44-17:48

Towards electromagnetic simulations with the gyrokinetic full-f code PICLS

Speaker

Annika Stier

17:48-17:52

NBI energetic particle confinement and orbit characterization for Divertor Tokamak Test plasma scenarios

Speaker

Chiara De Piccoli

17:52-17:56 Nonlocal transport theory in relativistic plasmas

Speaker

Karima Bendib-Kalache

17:56-18:00

Quantification and Comparison of Magnetic and Kinetic Chaos in Toroidal Plasmas

Speaker

Prof. Yannis Kominis

18:00