

FuseNet PhD event 2026 - Tuscia University - Viterbo

Poster session 1: 15:00 - 16:10

Panel	Name	Affiliation	Topic of your PhD project
1	Aaron Vesa	Aalto University, Finland	Gas flow and pumping in tokamaks
2	Ahmad Al-Fatly	University of Manchester, United Kingdom	Investigation and characterisation of novel additively manufactured tungsten.
3	Alan Ricardo Cintora de la Cruz	Università di Padova-Centro Ricerche Fusione, Italy	Design and implementation of high-frequency diagnostic systems in the RFX-mod2 device
4	Albert Civit	Technical University of Catalonia, Spain	3D non-linear MHD simulations of stellarator instabilities
5	Alessandra Tonel	Università di Padova-Centro Ricerche Fusione, Italy	Plasma rotation and MHD instabilities
6	Alexis Pittas	National Center for Scientific Research "Demokritos", Greece	Radiation damage effects on FeCr alloys
7	Andrea Corbioli	Università di Padova-Centro Ricerche Fusione, Italy	Application of non-linear control techniques to MHD stability of fusion devices
8	Andrea Marchegiani	University of Tuscia, Italy	Characterisation of HTS coils and prototyping of measurement devices
9	Andrea Mastrogirolamo	Politecnico di Milano, Italy	Boundary plasma modelling in tokamak and linear machines
10	Anna Taipale	University of Oxford, United Kingdom	Crystal Plasticity Modelling of Fracture of Tungsten
11	Benedikt Buchner	Max Planck Institute for Plasma Physics, Germany	Depth profiling of hydrogen isotopes and helium to large depths
12	Carlo Rossetti	Università di Padova-Centro Ricerche Fusione, Italy	MBSE and Digital Twin based development of Balance of Plant for fusion power reactors
13	Carlos Refugio Muñoz Garcia	Stuttgart universität	Development of a mode detector for ITER's high power waveguides
14	Carolina Albanese	University of Tuscia, Italy	Lattice Boltzmann Method for Multiphase Flows
15	Charles Edwards	University of Manchester, United Kingdom	Hydrogen trapping and permeation in ceramic coatings for fusion powerplant applications
16	Charlotte Brown	University of Manchester, United Kingdom	Advanced tungsten manufacturing techniques for fusion applications
17	Christian Avanzato	University of Tuscia, Italy	Pumping and puffing systems for the DTT tokamak
18	claudia salcuni	CIEMAT	Stellarator Turbulence Optimisation
19	Constant Panisset	École Polytechnique Federale de Lausanne (EPFL) - Swiss Plasma Center, Switzerland	Development of Multistage Depressed Collector for Gyrotrons
20	Daniel Švorc	Institute of Plasma Physics, Czech Academy of Sciences	Improved integrated modelling of particle transport around the separatrix
21	David Becker	DIFFER, The Netherlands	Alternative microwave sources for ECRH
22	David Bermúdez	SCK CEN	Modelling and experimental determination of the fracture toughness of ITER structural materials
23	Elouen SUARD	Aix Marseille Université, France	Gas-surface interactions in fusion reactors: experimental simulation of fuel recycling
24	Emanuele Corongiu	University of Cagliari, Italy	Monitoring of transient events in nuclear fusion machines by machine learning
25	Erica Lo Cascio	University of Palermo, Italy	From Simulation to Engineering: Proof of Concept of a Digital Twin for Tokamak Design
26	Márton Vavrik	Budapest University of Technology and Economics, Hungary	Schlieren diagnostic for the characterization of propellant gas flow suppression in the Shattered Pellet Injector of the ITER DMS
27	Farouq Alatassi	University of Manchester, United Kingdom	An intersection between microwave physics and materials for nuclear fusion applications.
28	Federico Gaspari	Politecnico di Milano, Italy	Plasma Wall Interaction. The erosion of boron and mixed boron-tungsten materials and its role in plasma pollution, addressing it both through experiments and the use of modelling tools.
29	Francesco Latini	University of Tuscia, Italy	Integrated experimental and numerical study of plasma disruptions in the ENN's EXL-50U and EHL-2 tokamaks
30	Francisco Miranda	SCK CEN Belgian Nuclear Research Centre, Belgium	Casting light on tungsten for ITER: Unraveling irradiation effects
31	Frankie Hough	University of Manchester, United Kingdom	Utilising High Temperature In-Situ EBSD to Observe Phase Changes in RAFM Steels
32	Freddie Daniels	Durham University, United Kingdom	Computational modelling of polycrystalline superconductors for fusion using Time-Dependent Ginzburg-Landau theory.
33	Georges Chahni	University of Manchester, United Kingdom	Development of testing methods for newly developed RAFM Steels
34	Gianluca Camera	Università di Padova-Centro Ricerche Fusione, Italy	Electromagnetic analyses of plasma disruptions
35	Gianluca Di Pietro	University of Tuscia, Italy	Research on Power Supply Systems Tailored for Fusion Applications, Including Power Electronics and Control
36	Gianluca Palumbo	ENEA, Italy	MITICA cryopumps and cryogenic plant
37	Giulia Emma	Università di Padova-Centro Ricerche Fusione, Italy	First application of visible tomography to characterise beam homogeneity in the SPIDER multi-beamlet configuration
38	Giulio Azzalin	Consorzio RFX	Optimization of the negative ion source prototypes for the ITER injector: impact of RF discharge dynamics on plasma expansion and beam extraction
39	Giuseppe Nicolò	University of Palermo, Italy	Multiphysics study of the nuclear, thermofluid-dynamic, and thermomechanical performance of components exposed to the plasma of a nuclear fusion reactor
40	Iacopo Regoli	University of Pisa - DICI, Italy	Neutral Beam Injector Sources
41	Inès Vergara	École Polytechnique Federale de Lausanne (EPFL) - Swiss Plasma Center, Switzerland	Plasma diagnostic
42	Ivan Kuzmich	Max-Planck-Institut f. Plasmaphysik	Optimization of Diagnostic Sets for a Future Stellarator Reactor
43	Jack Atherton	Bangor University	Modelling Hydrogen Isotope Transport in Ceramic Coatings for future fusion power plants
44	Jaime Caballero	DIFFER	Modelling of turbulent transport in the edge and SOL using gyrokinetics simulations
45	Jaime Romero Picapiedra	University Carlos III of Madrid, Spain	Physical mechanisms of I-mode type improved confinement regimes in fusion plasmas confined in a tokamak.
46	Jakub Chlum	Czech Technical University in Prague, Czech Republic	Bolometry diagnostics for tokamak power exhaust studies
47	James Tufnail	University of Oxford, United Kingdom	Radiation Damage of Superconductors
48	Jiří Malinák	Czech Technical University in Prague, Czech Republic	Integrated modelling of impurity transport across the separatrix of tokamak plasmas
49	JISHANT TALWAR	École Polytechnique Federale de Lausanne (EPFL) - Swiss Plasma Center, Switzerland	Study on high current ReBCO Laminated stacked-tape soldered conductor (LASSO) concept for quench protection of large-scale magnets
50	Jonathan Pavan	Commissariat à l'Energie Atomique, France	Cooling HTS Conductors for Fusion: How Cold Is Cold Enough?
51	Joost Prins	Eindhoven University of Technology, The Netherlands	Neural Green's Operators for Kinetic Plasmas
52	Juan Pablo Broude Garcia	University of Liverpool	Dust Transport in Magnetized Plasmas
53	Jule Frank	Max Planck Institute for Plasma Physics, Germany	Physics-Informed Graph Neural Networks for Surrogate Modeling of Finite Element Structural Analyses of Stellarator Fusion Coils
54	Julijan Peric	University of Ljubljana, Slovenia	Novel approaches for validation of nuclear cross-sections in the water activation process for fusion applications
55	Laura Pittaluga	Commissariat à l'Energie Atomique, France	Integrated design of high field magnetic systems for a fusion power plant
56	Letizia Melaragni	University of Tuscia, Italy	Development of a system for the mitigation of plasma disruptions in DTT, based on the lshattering of cryogenic pellets
57	Lorenzo Bramucci	Università di Padova-Centro Ricerche Fusione, Italy	Modelling and Analysis of the MAST-U divertor: opportunities toward the design of an innovative divertor for ARC and DEMO
58	Lorenzo Milia	University of Cagliari, Italy	Speeding up beam simulations with Physics-Informed Neural Networks: a proof-of-concept approach to solve the Poisson equation for negative ion beam simulations
59	Lorenzo Saccaro	Università di Padova-Centro Ricerche Fusione, Italy	Physics-informed deep learning neural networks models for real-time control of tearing instabilities in magnetic confinement fusion experiments
60	Luca Orlandi	Università di Padova-Centro Ricerche Fusione, Italy	Development of machine learning methods to detect and resolve faults in plasma diagnostics