

# Multi-scale Energetic particle Transport in fusion devices jointly organized with the "Final MET Workshop"

**CNPS** workshop on

**ENEA**

3-5 March 2021  
ZOOM videoconference  
by remote participation

## Report of Contributions

Contribution ID: 1

Type: **not specified**

## Opening

*Wednesday, 3 March 2021 08:55 (5 minutes)*

**Presenter:** ZONCA, Fulvio

Contribution ID: 2

Type: **not specified**

## **Construction of energetic particle fluxes due to Alfvénic fluctuations from parallel mode structures**

*Wednesday, 3 March 2021 09:00 (35 minutes)*

**Presenter:** FALESSI, matteo Valerio (ENEA C.R. Frascati - ENEA for EUROfusion)

Contribution ID: 3

Type: **not specified**

## **DAEPS calculation of low frequency kinetic continuous spectrum**

*Wednesday, 3 March 2021 09:35 (35 minutes)*

**Presenter:** LI, Yueyan

Contribution ID: 4

Type: **not specified**

## **Flux surface averaged expressions of energetic particle fluxes for global transport studies of phase space zonal structures in tokamaks**

*Wednesday, 3 March 2021 10:10 (35 minutes)*

**Presenter:** ZONCA, Fulvio (ENEA C.R. Frascati)

Contribution ID: 5

Type: **not specified**

## **Energetic particle transport in stellarators: theoretical foundations**

*Wednesday, 3 March 2021 11:15 (35 minutes)*

**Presenter:** ZOCCO, Alessandro (MPIPP Greifswald)

Contribution ID: 6

Type: **not specified**

## **Gyrokinetic investigation of the nonlinear interaction of Alfvén instabilities and energetic-particle driven geodesic acoustic modes**

*Wednesday, 3 March 2021 11:50 (35 minutes)*

**Presenter:** VANNINI, Francesco (Max Planck Institute for Plasma Physics)

Contribution ID: 7

Type: **not specified**

## **Isotope effects on the Energetic Particle dynamics induced by off-axis neutral beam injection on ASDEX Upgrade**

*Thursday, 4 March 2021 09:00 (35 minutes)*

**Presenter:** LAUBER, Philipp (IPP)



Contribution ID: 8

Type: **not specified**

## **Modeling of alpha particle transport and losses in the presence of magnetic islands**

*Thursday, 4 March 2021 09:35 (35 minutes)*

**Presenter:** ZARZOSO, David (CNRS)

Contribution ID: 9

Type: **not specified**

# **Implicit full f particle simulations of Alfvén waves and energetic particle physics**

*Thursday, 4 March 2021 10:10 (35 minutes)*

**Presenter:** LU, Zhixin (Max-Planck Institute of Plasma Physics)

Contribution ID: **10**

Type: **not specified**

## **Interaction of alpha particles with Alfvén modes in ITER 15MA case**

*Thursday, 4 March 2021 11:15 (35 minutes)*

**Presenter:** MENG, Guo

Contribution ID: 11

Type: **not specified**

## **Simulation Energetic particle transport and 1D reduced model**

*Thursday, 4 March 2021 11:50 (35 minutes)*

**Presenter:** CARLEVARO, Nafia (ENEA, Fusion and Nuclear Safety Department, C. R. Frascati, Via E. Fermi 45, 00044 Frascati (Roma), Italy)

Contribution ID: 12

Type: **not specified**

## **Electromagnetic simulations with EUTERPE in tokamak geometry and for W7-X**

*Friday, 5 March 2021 09:00 (35 minutes)*

**Presenter:** KÖNIES, Axel (Max-Planck-Institute for Plasma Physics (IPP))

Contribution ID: 13

Type: **not specified**

## **Gyrokinetic simulations of electromagnetic turbulence with global particle-in-cell codes**

*Friday, 5 March 2021 09:35 (35 minutes)*

**Presenter:** MISHCHENKO, Oleksiy (Max Planck Institute for Plasma Physics)

Contribution ID: 14

Type: **not specified**

## **Global gyrokinetic modelling of AEs in ITER & progress towards realistic distribution functions**

*Friday, 5 March 2021 10:10 (35 minutes)*

**Presenter:** HAYWARD-SCHNEIDER, Thomas (Max Planck Institute for Plasma Physics)

Contribution ID: 15

Type: **not specified**

## **Nonlinear dynamics of frequency chirping energetic particle modes**

*Friday, 5 March 2021 11:15 (35 minutes)*

**Presenter:** WANG, Xin



Contribution ID: 16

Type: **not specified**

## **Preliminary studies of Energetic Particle driven Alfvénic modes for a model DTT equilibrium using HYMAGYC**

*Friday, 5 March 2021 11:50 (35 minutes)*

**Presenter:** VLAD, Gregorio (ENEA-FSN-FUSPHY-TSM)

Contribution ID: 17

Type: **not specified**

## **Concluding remarks on MET Project – Closing**

*Friday, 5 March 2021 12:25 (15 minutes)*

**Presenter:** ZONCA, Fulvio (ENEA C.R. Frascati)