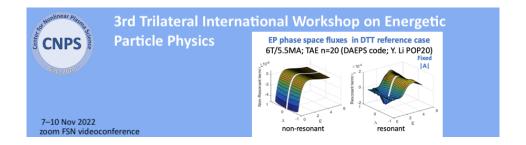
# Organized by the Center for Nonlinear Plasma Science



## **Report of Contributions**

Contribution ID: 1 Type: not specified

# Overview of KSTAR experiments on EP and diagnostics status

Monday, 7 November 2022 08:00 (30 minutes)

Talk 1

**Presenter:** KIM, Junghee (Korea Institute of Fusion Energy)

**Session Classification:** Day 1 - Session 1

Contribution ID: 2 Type: not specified

## Simulations of fishbone and EPM in the EAST tokamak

Monday, 7 November 2022 08:30 (30 minutes)

Talk 2

**Presenter:** SHEN, Wei (ASIPP)

**Session Classification:** Day 1 - Session 1

Contribution ID: 3 Type: not specified

### Investigation on chirping-mode dynamics

Monday, 7 November 2022 09:00 (30 minutes)

Talk 3

**Presenter:** BRIGUGLIO, Sergio (ENEA)

**Session Classification:** Day 1 - Session 1

Contribution ID: 4

Type: not specified

# Entropy calculations in the nonlinear wave-particle interactions of Berk-Breizman model

Monday, 7 November 2022 09:40 (30 minutes)

Talk 4

**Presenter:** LEE, Jungpyo (Hanyang University, Seoul, South Korea)

**Session Classification:** Day 1 - Session 2

Contribution ID: 5 Type: **not specified** 

### The Chinese Magnetic Fusion Program

Monday, 7 November 2022 10:10 (40 minutes)

Talk 5

**Presenter:** WAN, Baonian (ASIPP)

**Session Classification:** Day 1 - Session 2

Contribution ID: 6 Type: not specified

# CLT-K hybrid simulations of EP interaction with tearing modes

Tuesday, 8 November 2022 08:00 (30 minutes)

Talk 1

Presenter: MA, Zhiwei (IFTS)

**Session Classification:** Day 2 - Session 1

Contribution ID: 7 Type: **not specified** 

## Global Alfvénic modes excitation in Ohmic Tokamak plasmas following magnetic reconnection events

Tuesday, 8 November 2022 08:30 (30 minutes)

Talk 2

**Presenter:** KRYZHANOVSKYY, Artur (Consorzio RFX and CRF – University of Padova, Italy)

**Session Classification:** Day 2 - Session 1

Contribution ID: 8 Type: not specified

#### Simulations of EP transport in rotating RMPs

Tuesday, 8 November 2022 09:00 (30 minutes)

Talk 3

**Presenter:** RHEE, Tongnyeol (Korea Institute of Fusion Energy, Rep. of Korea)

**Session Classification:** Day 2 - Session 1

Contribution ID: 9 Type: **not specified** 

# Energetic particle nonlinear equilibria and transport processes in burning plasmas

Tuesday, 8 November 2022 09:40 (30 minutes)

Talk 4

Presenter: FALESSI, matteo Valerio (Center for Nonlinear Plasma Science and C.R. ENEA Frascati,

Frascati, Italy)

**Session Classification:** Day 2 - Session 2

Contribution ID: 10 Type: not specified

# Gyrokinetic study of co-existing Alfvén Eigenmode and microturbulence in KSTAR

Tuesday, 8 November 2022 10:10 (30 minutes)

Talk 5

Presenter: CHOI, Gyungjin (Seoul National University)

**Session Classification:** Day 2 - Session 2

Contribution ID: 11 Type: not specified

# On nonlinear scatterings between drift waves and Toroidal Alfvén eigenmodes

Wednesday, 9 November 2022 08:00 (30 minutes)

Talk 1

Presenter: CHEN, Liu

**Session Classification:** Day 3 - Session 1

Contribution ID: 12 Type: not specified

## Interplay of KSTAR high $\beta N$ mission and fast-ion transport

Wednesday, 9 November 2022 08:30 (30 minutes)

Talk 2

Presenter: KANG, Jisung (KFE)

**Session Classification:** Day 3 - Session 1

Contribution ID: 13 Type: not specified

# Linear and non-linear benchmark between HYMAGYC, MEGA and ORB5 codes using the NLED-AUG test case to study Alfvénic modes driven by energetic particles

Wednesday, 9 November 2022 09:00 (30 minutes)

Talk 3

**Presenter:** VLAD, Gregorio (ENEA-FSN-PLAS-TSV)

**Session Classification:** Day 3 - Session 1

Contribution ID: 14 Type: not specified

## Theoretical studies of low-frequency Alfvén waves in tokamak plasmas

Wednesday, 9 November 2022 09:40 (30 minutes)

Talk 4

Presenter: MA, Ruirui (South Western Institute of Physics, Chengdu)

**Session Classification:** Day 3 - Session 2

Contribution ID: 15 Type: not specified

# Progress in Physical mechanisms behind enhanced confinement regimes of tokamak plasmas

Wednesday, 9 November 2022 10:10 (40 minutes)

Talk 5

Presenter: HAHM, Taik Soo (Seoul National University)

**Session Classification:** Day 3 - Session 2

Contribution ID: 16 Type: not specified

## Onset and evolution of EP driven instabilities in KSTAR

Thursday, 10 November 2022 08:00 (30 minutes)

Talk 1

Presenter: JHANG, Hogun (Korea Institute of Fusion Energy, Rep. of Korea)

**Session Classification:** Day 4 - Session 1

Contribution ID: 17 Type: not specified

#### Simulations of beam-driven modes in KSTAR

Thursday, 10 November 2022 08:30 (30 minutes)

Talk 2

Presenter: ZHANG, LuLu (IFTS)

**Session Classification:** Day 4 - Session 1

Contribution ID: 18 Type: not specified

#### Advanced energetic particle transport models

Thursday, 10 November 2022 09:00 (30 minutes)

Talk 3

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

**Session Classification:** Day 4 - Session 1

Contribution ID: 19 Type: not specified

# Core localized alpha-channeling via low frequency Alfvén mode generation in reversed shear scenarios

Thursday, 10 November 2022 09:40 (30 minutes)

Talk 4

Presenter: QIU, Zhiyong (IFTS, Zhejiang University)

**Session Classification:** Day 4 - Session 2

Contribution ID: 20 Type: not specified

## Linear and nonlinear KAW physics in cylindrical plasmas

Thursday, 10 November 2022 10:10 (30 minutes)

Talk 5

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

**Session Classification:** Day 4 - Session 2

Final Discussion

Contribution ID: 21 Type: not specified

### **Final Discussion**

Thursday, 10 November 2022 11:00 (55 minutes)

Final Discussion

Session Classification: Final Discussion and Closing

Closing

Contribution ID: 22 Type: not specified

### Closing

Thursday, 10 November 2022 11:55 (5 minutes)

Closing

Session Classification: Final Discussion and Closing

Contribution ID: 23 Type: not specified

# Physics basis and research plan of the Divertor Tokamak Test facility

Tuesday, 8 November 2022 10:40 (40 minutes)

Talk - 6

Presenter: CRISANTI, Flavio (University of Tuscia and DTT)

**Session Classification:** Day 2 - Session 2