

Agenda (Morning in JST) of 2026 US-J MHD WS (Ver.May 12_11)

Date : May 19-21, 2026

Place : Research I Building 4F #402 in NIFS, Japan

Style : Hybrid(in person + remote)

Meeting address for remote participants will be sent to participants, who have made registration.

1st Day 5/19 5/18 5/18

JST EDT PDT Invited(talk;~25min, discussion;~10min), Oral(talk;~15min, discussion;~5min)

| JST | EDT | PDT | | | | |
|-------|-------|-------|------|----------------|----------------|--|
| 8:30 | 18:30 | 15:30 | 0:05 | Opening | Furukawa | |
| 8:35 | 18:35 | 15:35 | 0:10 | Welcome speech | Yamada NIFS GD | |
| 8:45 | 18:45 | 15:45 | 0:35 | Invited | Ko | Numerical study on vertical position control using non-axisymmetric and ELM control coils toward the upcoming heating operation phase of JT-60SA |
| 9:20 | 19:20 | 16:20 | 0:20 | Oral | Pharr | Resistive and kinetic modifications to ideal error field sensitivity in tokamaks |
| 9:40 | 19:40 | 16:40 | 0:20 | Oral | Furukawa | MHD linear response of tokamak plasmas by RESTOK code |
| 10:00 | 20:00 | 17:00 | 0:15 | | | Break |
| 10:15 | 20:15 | 17:15 | 0:20 | Oral | Okamoto | Study of penetration and propagation processes of external RMP fields in the plasma on HYBTOK-II tokamak |
| 10:35 | 20:35 | 17:35 | 0:15 | Discussion | | |
| 10:50 | 20:50 | 17:50 | 0:35 | Invited | Jalalvand | AI-Driven Advances at DIII-D Toward Intelligent Tokamak Operation |
| 11:25 | 21:25 | 18:25 | 0:20 | Oral | Bando | Self-consistent solution of Grad-Shafranov equation by physics-informed neural network for strong reversed-shear plasmas |
| 11:45 | 21:45 | 18:45 | 0:15 | Discussion | | |
| 12:00 | 22:00 | 19:00 | 1:30 | lunch | | |
| 13:30 | 23:30 | 20:30 | 1:30 | Lecture1 | Watanabe | Fundamentals of MHD equilibrium in toroidally magnetized plasmas and its control |
| 15:00 | 1:00 | 22:00 | 2:00 | | | NIFS tour(LHD, CHD, small tokamak) |
| 17:00 | 3:00 | 0:00 | | Adjoin | | |

2nd Day

5/20 5/19 5/19

JST EDT PDT

Invited(talk;~25min, discussion;~10min), Oral(talk;~15min, discussion;~5min)

| | | | | | | |
|-------|-------|-------|------|------------|------------------|--|
| 8:45 | 18:45 | 15:45 | 0:35 | Invited | Aiba | Identification of a window for quiescent H-mode operation in MHD stability diagram of DIII-D plasmas |
| 9:20 | 19:20 | 16:20 | 0:20 | Oral | Lunia | Multi-machine Analysis of RMP ELM Suppression Thresholds in Double-Null Configurations |
| 9:40 | 19:40 | 16:40 | 0:20 | Oral | Logan | Challenges in projecting ELM suppression requirements to Fusion Pilot Plants |
| 10:00 | 20:00 | 17:00 | 0:15 | Discussion | | |
| 10:15 | 20:15 | 17:15 | 0:10 | | | Group photo |
| 10:25 | 20:25 | 17:25 | 0:15 | | | Break |
| 10:40 | 20:40 | 17:40 | 0:35 | Invited | Bando | Resistive-wall modes in current ramp-up phase of strong reversed-shear plasmas of JT-60U |
| 11:15 | 21:15 | 18:15 | 0:35 | Invited | Ebrahimi | Multi-species extended MHD simulations of ELM-free negative triangularity plasmas and the CETOP SciDAC project |
| 11:50 | 21:50 | 18:50 | 0:20 | Oral | Varela Rodriguez | Core density collapses: simulations and experiments |
| 12:10 | 22:10 | 19:10 | 0:15 | Discussion | | |
| 12:25 | 22:25 | 19:25 | 1:15 | lunch | | |
| 13:40 | 23:40 | 20:40 | 1:30 | Lecture2 | Sato | Fundamentals of MHD instabilities: theory and simulation |
| 15:10 | 1:10 | 22:10 | 0:20 | | | Break |
| 15:30 | 1:30 | 22:30 | 1:30 | Lecture3 | Watanabe | On fundamentals of magnetic island dynamics in toroidally magnetized plasmas |
| 17:00 | 3:00 | 0:00 | | Adjoin | | |

19:00

Conference dinner

3rd Day

5/21 5/20 5/20

JST EDT PDT

Invited(talk;~25min, discussion;~10min), Oral(talk;~15min, discussion;~5min)

| | | | | | | |
|-------|-------|-------|------|------------|------------|--|
| 8:45 | 18:45 | 15:45 | 0:35 | Invited | Zimmermann | Variability of MHD instabilities in benign termination of high-current runaway electron beams in the JET and DIII-D tokamaks |
| 9:20 | 19:20 | 16:20 | 0:35 | Invited | Oshiro | Electrothermal dynamics of radiative collapse and current density profiles in tokamaks |
| 9:55 | 19:55 | 16:55 | 0:20 | Oral | Yokoyama | Intermittent annular crash during the current ramp-up phase in JT-60SA |
| 10:15 | 20:15 | 17:15 | 0:15 | Discussion | | |
| 10:30 | 20:30 | 17:30 | 0:15 | | | Break |
| 10:45 | 20:45 | 17:45 | 0:35 | Invited | Leuthold | ARC Physics Basis - MHD |
| 11:20 | 21:20 | 18:20 | 0:20 | Oral | Nishimura | Burst dynamics of ballooning mode turbulence driven by equilibrium flow |
| 11:40 | 21:40 | 18:40 | 0:15 | Discussion | | |
| 11:55 | 21:55 | 18:55 | 0:10 | | | Summary and closing |
| 12:05 | 22:05 | 19:05 | | Adjoin | | |