

12th QUEST Workshop
“RF startup and sustainment in Spherical Tokamak”
Agenda, RIAM 2024

1st February AM

9:20 -9:30

Yuichi Takase / Kazuaki Hanada

WS purpose and agenda

9:30 - 10:00

Yuichi Takase

Fusion Development at Tokamak Energy

10:00 - 10:40

Akira Ejiri

Study of current drive in the TST-2 spherical tokamak (Remote)

10:40-11:20

Hitoshi Tanaka

Recent Result of EC Start-up Experiment on LATE (Remote)

11:20-11:50

Yusuke Kosuga

Bootstrap current and flow in spherical tokamaks

11:50-12:50

Lunch

1st February PM

12:50-13:30

Hiroshi Idei

Recent Progress and ECH Plans in QUEST

13:30 - 14:10

Takumi Onchi

Electron cyclotron current start-up using a retarding electric field in the QUEST spherical tokamak

14:10-14:50

Masayuki Ono

Efficient ECCD non-inductive start-up and ramp-up and transition to a sustainment phase for an ST fusion reactor

14:50 - 15:20

Makoto Hasegawa

Plasma control system of QUEST and fast plasma shape recognition with Machine Learning

15:20 - 15:30

Coffee Break

15:30 - 16:10

Ryuya Ikezoe

Studies of fast electrons and corresponding kinetic modes on QUEST

16:10 - 16:50

Luis Delgado-Aparicio

Non-Maxwellian LHCD anisotropic features in the edge and core measured with a multi-energy HXR detector at WEST

16:50 – 17:30

Vladimir Shevchenko

ECRH Progress and Plans for ST40 (Remote)

17:30 – 18:10

Bodhi Biswas

Fully-relativistic EBW current drive simulations in STEP (Remote)

18:10 – **Group Photo**

2nd February AM

9:00-9:40

Roger Raman

Closed flux plasma startup using Transient CHI on QUEST

9:40- 10:10

Shin Kubo

Toward the numerical estimation of the power flow of the electron Bernstein wave

(Remote)

10:10 – 10:50

Atsushi Fukuyama

Kinetic full wave modeling of O-X-B mode conversion

10:50 – 11:30

Syunichi Shiraiwa

Implicit method for plasma conductivity and its application to electron Bernstein wave mode conversion

11:30-12:10

Nicola Bertelli

Initial study of the impact of the edge density fluctuations on the HHFW propagation in NSTX/NSTX-U plasmas

12:10 - 13:10 **Lunch**

2nd February PM

All suggested focus and output for this joint drafting session

Drafting of proposals for experiments, diagnosis, and analysis