

3rd A3 Foresight Workshop on Spherical Torus (ST)

Dec. 15-17, 2014

Okura Akademia Park Hotel, Kisarazu, Chiba, Japan
Room Ariake 有明 (2nd floor)

Talks : 45min=35+10, 30min=24+6, 20min=15+5

Restaurant : Breakfast (7:00-10:00LO)

Restaurant : Lunch (11:30-14:00LO)

Restaurant : Dinner (17:30-20:00LO)

DAY 0 : Dec 14 (Sunday)

Dec 14 (Sunday)

18:00 - 21:00 Dinner

DAY 1 : Dec 15 (Monday)

8:30 - 9:00 Registration

Session 1 : Overview talks Chair : INOMOTO, M.

9:00 - 9:15	Opening	
9:15 - 9:45	Overview of VEST research	HWANG, Y.S.
9:45 - 10:15	Recent research activities on the SUNIST	TAN, Y. (GAO, Z.)
10:15 - 10:45	Overview of UTST research	INOMOTO, M.

Coffee break

Session 2 : Overview / LH Chair : FENG, C.

11:15 - 11:45	Overview of TST-2 research	TSUJII, N.
11:45 - 12:15	Parametric Instabilities during Lower Hybrid Waves Injection into Inhomogeneous Plasmas	ZHAO, A.
12:15 - 12:35	Electromagnetic effects on parametric instabilities of lower hybrid waves	LIU, Z.

Lunch & Group Photo (13:50-14:10)

Session 3 : Concept / Design Chair : TAKASE, Y.

14:10 - 14:55	Proposal of negative triangularity for ST program	KIKUCHI, M.
14:55 - 15:25	ST fusion reactor for D-T and D-He3	NAGAYAMA, Y.
15:25 - 15:55	Fusion transmutation reactor based on fusion investment	HAN, J.H.
15:55 - 16:15	Conceptual Design Study of the Moderate Size Superconducting Spherical Tokamak Power Plant	GI, K.

Coffee break

Session 4 : Equilibrium 1 Chair : INOMOTO, M.

16:35 - 16:55	Equilibrium analysis on VEST plasma	LEE, J.W.
16:55 - 17:15	Thomson scattering measurements in QUEST and precise control of laser injection timing	HONMA, H.
17:15 - 17:35	Current density profile of VEST plasma	YANG, J.H.
17:35 - 17:55	Relaxation of electron temperature and density profiles after merging startup in UTST	SUGAWARA, T.
17:55 - 18:25	Discussion (Future Activities)	

Dinner

DAY 2 :Dec 16 (Tuesday)**Session 1 : Reconnection / Helicity** Chair : NAKAMURA, Ka.

9:00 - 9:30	Ion and electron heating during merging/reconnection startup of ST in MAST	TANABE, H.
9:30 - 9:50	Design and development of the helicity injection system in VEST	PARK, J.Y.
9:50 - 10:10	Slide-type 2-D Thomson scattering measurement for magnetic reconnection in UTST merging experiment	GUO, X.
10:10 - 10:30	Study of Electron Acceleration during Spherical Tokamak Merging in UTST device	USHIKI, T.

Coffee break

Session 2 : Flow / NBI Chair : WANG, W.

11:00 - 11:20	Diamagnetic measurement using TF coil current in VEST	KIM, Y.S.
11:20 - 11:40	Particle Orbit in RF-Driven Divertor Plasma on QUEST	ALAM, M.M.
11:40 - 12:00	Modelling of neutral beam injection in VEST	KIM, S.K.
12:00 - 12:30	Development of a high-current ion source for neutral beam injector of VEST	JUNG, B.K.

Lunch

Session 3 : Equilibrium 2 Chair : CHUNG, K.J.

14:00 - 14:30	Shape Reproduction in RF-Driven Divertor Plasma on QUEST	NAKAMURA, Ka.
14:30 - 15:00	Study of Eddy Currents in the Vacuum Vessel of SUNIST	TAN, Y.
15:00 - 15:20	Electron density measurements of non-inductive start-up plasma	YOSHIDA, Y.
15:20 - 15:40	Soft X-ray diagnostics and tomographic reconstruction for TST-2 non-inductive start-up plasma	YAJIMA, S.

Coffee break

Session 4 : Edge / Energetic particle Chair : ONO, Y.

16:10 - 16:40	Detection of ion Bernstein waves as an effective method of monitoring the edge profile evolution in the KSTAR H-mode plasmas	YUN, G.S.
16:40 - 17:00	Design of a hard X-ray measurement system for TST-2	NAKAMURA, Ke.
17:00 - 17:20	Comparison of collision operators for the geodesic acoustic mode	LI, Y.
17:20 - 17:40	Enhancement of electron density and density skewness in blobs induced by fuel gas puffing in ECR plasmas on QUEST	OYAMA, Y.
17:40 - 18:00	Calibration of the high-frequency magnetic probe and preliminary IRE studies at the SUNIST	LIU, Y.

Banquet

DAY 3 :Dec 17 (Wednesday)**Session 1 : Potential**

Chair : Ejiri, A.

9:00 - 9:20	Preliminary results of Langmuir probes measurement in SUNIST	CHAI, S.
9:20 - 9:40	Measurements of Plasma Space Potential by HIBP in LATE	YOSHIDA, A.
9:40 - 10:00	Investigation of high guide field reconnection in UTST merging experiment using floating potential measurement	YAMASAKI, K.
10:20 - 10:20	ExB shear effect on initially tilted eddys	CHOI, G.J.

Coffee break

Session 2 : EC / EB

Chair : HWANG, Y.S.

10:50 - 11:10	Circular TE11-based Waveguide Polarizer for Optimal Polarization Injection for Formation of Microwave Spherical Torus in LATE	NOZAWA, Y.
11:10 - 11:30	Calorimetric Measurement of Direct Loss of Energetic Electrons with Movable Limiters in Non-Inductive Current Driven Limiter Plasma with a microwave of 8.2 GHz on QUEST	HAMADA, N.
11:30 - 11:50	Electron cyclotron resonance heating experiment by EBW mode conversion at low field side X mode injection	LEE, H.Y.
11:50 - 12:10	Spectroscopic measurement of impurity radiation in TST-2	TAKEUCHI, T.
12:10 - 12:25	Closing	

Lunch

Adjourn