ITC29

The 29th International Toki Conference on Plasma and Fusion Research Ceratopia Toki, Toki-city, Gifu, Japan, October 27-30, 2020

1st Day - 27th, October (Tuesday)

09:30-10:30	Opening
10:30-10:50	Break
10:50-11:40	PL1: Go MATSUNAGA
	Opening the door to fusion: Completion of the JT-60SA tokamak construction
11:40-12:30	PL2: Tomohiro MORISAKI
	Challenges to Steady-State Operation towards Fusion Rector
12:30-14:00	Lunch
14:00-16:00	Poster 1
16:00-16:10	Break
16:10-16:40	I1: Heinrich Peter LAQUA
	Steady State ECRH Operation at the W7-X Stellarator
16:40-17:10	I2: Alexander BOCK
	Scalability of Advanced Scenarios to Reactor-Sized Devices
17:10-17:40	I3: Roberto PIOVAN
	PERSPECTIVE OF FUSION-FISSION HYBRID SYSTEMS WITH THE REVERSED FIELD PINCH AS A NEUTRON SOURCE
17:40-18:00	O0: Hideya NAKANISHI
	Demonstration of High-speed Data Replication Relay across Multiple Repository Sites Using a Global Loop Path
18:00-18:20	O1: Akira EJIRI
	A Model for Lower Hybrid Wave Induced Transport on the TST-2 Spherical Tokamak

2nd Day - 28th, October (Wednesday)

Extension of Operation Area for Steady State Operation on QUEST by Integrated Control with Hot Walls

Overview of hydrogen isotope retention characteristics for plasma facing walls after exposure in 2015-2019 QUEST plasma

PSI CONTROL FOR STEADY STATE OPERATION OF EAST TOKAMAK

11:30-12:00 I8: Hyeon K. PARK

Enigma of the Crash Time Scale and q0 of the Sawtooth Instability in Tokamak Plasma

12:00-12:20 O2: Seiki SAITO

Molecular Dynamics Simulation of Hydrogen Recycling on Tungsten Materials

12:20-14:00 Lunch

14:00-16:00 Poster 2

16:00-16:10 Break

16:10-16:40 I9: Michael FITZGERALD

Alpha particle physics in recent JET D-He³ plasmas

16:40-17:10 I10: Anders Henry NIELSEN

Numerical investigation of the Low- to High-confinement power threshold for different isotopes of hydrogen and helium at JET

17:10-17:40 I11: Christian Gabriel THEILER

Improved Understanding Of Power Exhaust Physics With The New, Baffled TCV Divertor

Mechanisms for Reduction of Ion Anomalous Transport in LHD, by Impurity Injection

18:10-18:30 O3: Jesus DOMINGUEZ-PALACIOS

3D non-linear hybrid kinetic-MHD modeling of ELMs using MEGA

3rd Day - 29th, October (Thursday)

Exploration of next generation three-dimensional magnetic configuration with enhanced zonal flows

Limit cycle oscillations associated with flow pulsation in Kelvin-Helmholtz turbulence in magnetically confined plasmas

Kinetic Modeling of Thermal Force for Impurity Transport in SOL-Divertor Plasma for DEMO

11:30-11:50 O4: T.-H. WATANABE

Cross-scale interactions of TEM/ETG instabilities in H/D plasmas

11:50-12:10 O5: Akihiro SHIMIZU

Current Status of Physics and Engineering Studies, and Construction of Quasi-Axisymmetric Stellarator CFQS

12:10-14:00 Lunch

14:00-16:00 Poster 3

16:00-16:10 Break

16:10-16:40 I16: Piero MARTIN

Science Basis and Present Status of the new Divertor Tokamak Test facility

16:40-17:10 I17: Katsuyoshi TSUMORI

Review of Engineering and Physics Researches on Negative-Ion-based NBI for LHD

17:10-17:40 I18: Stefano ATZENI

Laser Driven Inertial Fusion: Status and Perspective

17:40-18:00 O6: Masatoshi KONDO

Conceptual design of HFIR irradiation experiment for material compatibility study on liquid Sn divertor

18:00-18:20 O7: Nagato YANAGI

Engineering Design Studies on the Next-Generation Helical Device with High-Temperature Superconducting Magnet

4th Day - 30th, October (Friday)

10:00-10:30 I19: Yoshinobu KAWAHARA

Data-driven modeling of complex dynamics: Koopman analysis, dynamic mode decomposition and machine learning

10:30-11:00 I20: Hiori KINO

Development of Data-driven Methods as a bridge to Deductive Methods

Machine Learning Studies in Solar Physics

Development of a surrogate turbulent transport model and its usefulness in transport simulations

12:00-12:20 O8: Naoki KENMOCHI

Generative adversarial networks for plasma diagnostics and heating control

12:20-14:00 Lunch

14:00-14:30 I23: Ivo FURNO

Physics of negative ions and helicon waves in the Resonant Antenna Ion Device (RAID)

14:30-15:00 I24: Keiichiro URABE

Influence of Gas-Refractive-Index Dispersion on Measurement of Electron Density Using Dispersion Interferometry

15:00-15:30 I25: Yasushi ONO

Reconnection startup and heating scenario for burning spherical tokamak plasmas

15:30-16:00 I26: Kanya KUSANO

A challenge to physics-based prediction of large solar flares and solar eruptions

16:00-16:20 O9: Eiichirou KAWAMORI

 $Generation \ of \ Langmuir \ wave \ supercontinuum \ in \ laboratory \ plasma \ experiment$

16:20-16:30 Break

16:30-17:00 Summary: Shin KUBO

17:00 Closing

Poster 1 [27th, October (Tuesday) 14:00-16:00]

Poster-1-F2-1 M.S. ISLAM

Numerical Simulation Study of the Magnetic Flux Tube Expansion on the Divertor Plasma Parameters by the LINDA Code

Poster-1-F2-2 Irene CASIRAGHI

First principle scenario modelling of the Divertor Tokamak Test facility

Poster-1-F2-3 Kunihiro OGAWA

Characteristics of Neutron Emission Rate in Electron Cyclotron Heated LHD Deuterium Plasmas

Poster-1-F2-4 Hideo SUGAMA

Derivation of the momentum balance equation for the gyrokinetic system based on the Eulerian variational principle

Poster-1-F2-5 Siriyaporn SANGAROON

Neutron Emission Profile Measurements During Tangential Neutral Beam Injection in Extremely Low-Density Regime in LHD

Poster-1-F2-6 Mamoru SHOJI

Simulation of Impurity Transport and Deposition in the Closed Helical Divertor Region in the Large Helical Device Using the ERO2.0

Poster-1-F2-7 Tatsuya KOBAYASHI

Development of two-dimensional beam emission spectroscopy having high spatial resolution in LHD

Poster-1-F2-8 Motoshi GOTO

Measurement of anisotropic electron velocity distribution function in LHD by polarization spectroscopy

Poster-1-F2-9 Shuji KAMIO

Observation of Hydrogen and Deuterium Beam Ion Transport Due to Toroidal Alfvén Eigenmode Using Neutral Particle Analyzer in LHD

Poster-1-F2-10 Keiji FUJITA

Self-consistent calculation of electrostatic potential and multi-ion-species transport in impurity hole plasmas with global effects

Poster-1-F2-11 Masahiro KOBAYASHI

Mechanism of radiation cooling front stabilization with edge magnetic island induced by RMP application

Poster-1-F2-12 Osamu WATANABE

Expansion of tokamak plasma operation region by stationary direct current of central solenoid

Poster-1-F2-13 Shinichiro TODA

Transport simulation directly coupled with gyrokinetic transport models for helical plasmas

Poster-1-F2-14 Hideaki MATSUURA

Knock-on Tail Formation in Deuteron Velocity Distribution Function by High-Purity Hydrogen Beam Injection Observed in the LHD Deuterium Plasma

Poster-1-F2-15 Hideo NUGA

Analysis of NB fast ion transport mechanisms in MHD quiescent LHD plasmas

Poster-1-F2-16 Naohiro KASUYA

Development of Integrated Transport Simulation Scheme for Impurity Control in Tokamak Plasmas

Poster-1-F2-17 Haruhiko HIMURA

Research Plan for Investigating Canonical Flux Tube of Toroidal Plasmas in RELAX

Poster-1-F3-1 Naoto IMAGAWA

Investigation of isotope effect on particle confinement in Large Helical Device

Poster-1-F3-2 Shin NISHIMURA

Neoclassical Parallel Viscosity Effects of Fast Ions in NBI-heated and/or Burning Plasmas in Quasi-symmetric Stellarators

Poster-1-F3-3 Shu NISHIMOTO

Experimental Study of Zonal Flow Dependence on Geodesic Curvature

Poster-1-F3-4 Shota MOCHINAGA

 $Transport\ analysis\ of\ PLATO\ tokamak\ plasma\ using\ integrated\ code\ TASK$

Poster-1-F3-5 Hiroki KAYANO

Observation of plasma heating by waves with Difference-Frequency of two ICRF waves in the GAMMA 10/PDX

Poster-1-F3-6 Akio SANPEI

Features of Electron Density of Low-Aspect-Ratio Reversed Field Pinch Plasmas

Poster-1-F3-7 Takeshi IDO

Design of a Heavy Ion Beam Probe for the QUEST spherical tokamak

Poster-1-F3-8 Hiroto MATSUURA

Consideration on time delay of thermocouple signal in divertor heat flux measurement

Poster-1-F3-9 Hiroki KAMINAGA

Reduction of co-extracted electron beam by magnetic configuration on negative ion source by using TPDsheet-U

Poster-1-F3-10 Hao WANG

Simulations of energetic particle driven instabilities in CFQS

Poster-1-F3-11 Shu ITO

 $\it Effects of response of RMP on interchange instability under different operational conditions$

Poster-1-F3-12 Kouhei NAKATANI

Normalized pressure dependence of turbulent transport influenced by the Shafranov shift

Poster-1-F3-13 Kengoh KURODA

Initial Results from High-field-side Transient CHI Start-up on QUEST

Poster-1-F3-14 Katsuji ICHIGUCHI

Numerical Analysis of Non-Resonant Mode in LHD Partial Collapse with Net Toroidal Current

Poster-1-F3-15 Yasuhiro YAMAMOTO

Magnetic Configuration and Heating Location Dependences of the Toroidal Torques by ECH in LHD

Poster-1-F3-16 Keigo OTA

Influence of the momentum dependence of radial diffusion on the transport of thermal and energetic particles in tokamak plasmas

Poster-1-F3-17 Shinsuke SATAKE

Neoclassical Optimization Study of Heliotron Devices

Poster-1-F4-1 Hokuto YAMADA

Study on an Air-core High Temperature Superconducting Transformer for a Large Current Supply

Poster-1-F4-2 Aoto YAMAGUCHI

Identification of Normal Transition in a Bundle HTS Cable Used for an HTS Transformer

Poster-1-F4-3 Hiroki NATSUME

Computer tomography on divertor impurity monitor for ITER including wall reflection effects

Poster-1-F4-4 Tetsuhiro OBANA

Modeling of stacked single-layer coils wound with Bi2223 tapes using a lumped constant circuit

Poster-1-F4-5 Tomoyuki NAITO

Thermal Conductivity of Single and Fifty-Stacked HTS Tapes for the Design of a Superconducting Fusion Magnet

Poster-1-F4-6 Kazuo NAKAMURA

Quaternion Analysis of Direct Matrix Converter Based on Space-Vector Modulation

Poster-1-F4-7 Makoto Inami KOBAYASHI

Analysis of transient deuterium desorption rate under deuterium gasdriven permeation through tungsten

Poster-1-F4-8 Leo IIZUKA

Detection of mass transfer in liquid metals by quartz crystal microbalance

Poster-1-F4-9 Sumi YOKOYAMA

Improvement of Environmental Tritium Behavior Model: Calculation of OBT concentration in plants using the MOGRA code

Poster-1-F4-10 Reo NAKAYA

Measurement of particle separation by using a multi-channel electrostatic probe around the magnetic null-point of Cusp-type Direct Energy Converter

Poster-1-F4-11 Hiroaki OYAGI

Evaluation of electron inflow to anteroposterior electrodes in a secondary electron direct energy converter simulator

Poster-1-F4-12 Susumu HATAKEYAMA

Material compatibility of high-purity liquid lead lithium alloy with various materials

Poster-1-F4-13 Junichi MIYAZAWA

Comparative Study on the Functional Liquid Metals for Fusion Reactor Blanket Systems

Poster-1-F4-14 Gaku YAMAZAKI

Comparison of corrosion products of JLF-1 steel in FLiNaK with H_2O or HF solution

Poster-1-F4-15 Katsunori IKEDA

Study of Hydrogen Isotope Beam in Negative-Ion-Based Neutral Beam Injector

Poster-1-F4-16 Yoshiro NARUSHIMA

Performance of Straight Shaped WISE High-Temperature Superconductor composed of REBCO and BSCCO tapes

Poster-1-F4-17 Rongshi ZHANG

Enhancement of arc ignition on tungsten in helium plasmas with impurity gases

Poster-1-F4-18 Toyo YAMASHITA

Microstructural characterization of the weld zones on ODS-Cu

Poster-1-F5-1 Kenichi NAGAOKA

Turbulence characteristics at stability boundary of electroconvection turbulence

Poster-1-F5-2 Keiichiro RACHI

Experimental Study on Microwave Generation due to Merged Instability in F-Band Surface Wave Oscillator

Poster-1-F5-3 Havato KAWAZOME

Numerical study on radiation trapping of He I resonance lines in arc plasma under high-gas pressures

Poster-1-F5-4 Kladphet THANET

Study On Chemical And Atomic Processes For Radical Distribution Along With Atmospheric Pressure Plasma Jet

Poster-1-F5-5 Toru I. TSUJIMURA

Trajectory Shift in Propagation of Electron Cyclotron Waves due to Berry Curvature in Magnetized Plasma

Poster-1-F5-6 Vanni ANTONI

Complexity and its control in dissociation reaction network

Poster-1-F5-7 Teruou TAKAYAMA

Multi-Objective Optimization of Superconducting Linear Acceleration System for Pellet Injection by Using Finite Element Method

Poster-1-F5-8 Hiroshi KASAHARA

Development of High Performance Steady-State Plasma Heating Scenarios with ICRF Waves in D Plasmas in LHD

Poster-1-F5-9 Yoshihiko NAGASHIMA

 $Development\ of\ an\ Electrode\ System\ for\ Edge/Scrape-off\ Layer\ Measure-ments\ during\ Steady\ State\ Tokamak\ Operations\ in\ QUEST$

Poster-1-F5-10 Yasuo YOSHIMURA

Time evolution of electron and ion temperatures in electron-heated long pulse discharges in LHD

Poster 2 [28th, October (Wednesday) 14:00-16:00]

Poster-2-F2-1 Tsukasa SUGIYAMA

Effects of V-shaped target angle on plasma behavior in the GAMMA 10/PDX divertor simulation experimental module

Poster-2-F2-2 Hiroki GAMO

Influence of nitrogen ratio during combined seeding with hydrogen on plasma detachment in the divertor simulation experimental module of $GAMMA\ 10/PDX$

Poster-2-F2-3 Taichi SEKI

Acceleration of Magnetized Plasmoid by Pulsed Magnetic Coil

Poster-2-F2-4 Jie HUANG

3D nonlinear modeling of MHD instabilities for low-q plasma on J-TEXT

Poster-2-F2-5 Shun ADACHI

Sensitivity calibration of a receiver for Collective Thomson scattering in the LHD

Poster-2-F2-6 Xingyu GUO

Measurement of Mode-Conversion Process to Electron Bernstein Waves in Low Aspect ratio Torus Experiment

Poster-2-F2-7 Tatasuya YOKOYAMA

Data-driven approach on the mechanism of radiative collapse in Large Helical Device

Poster-2-F2-8 Tetsutarou OISHI

EUV and VUV Spectra of NeIII-NeX Line Emissions Observed in the Impurity Gas-puffing Experiments of the Large Helical Device

Poster-2-F2-9 Masanori NUNAMI

Pinpoint gyrokinetic simulation for turbulent transport prediction assisted by machine learning and transport model

Poster-2-F2-10 Hibiki YAMAZAKI

Simulation and Design of an ICRF Antenna Using the Petra-M Code for a New Linear Device

Poster-2-F2-11 Nandini YADAVA

Investigation of Recycling and Impurities influxes in Aditya-U Tokamak Plasmas

Poster-2-F2-12 Qilin YUE

Investigation of Dynamic Retention during Long Duration Discharges Using Fast Ejecting System of Targeted Sample (FESTA) on QUEST

Poster-2-F2-13 Malik IDOUAKASS

Numerical Observation of an m/n=2/1 Mode with Strong Energetic Particle Redistribution in LHD

Poster-2-F2-14 Daisuke UMEZAKI

Effect of elastic scattering between ions and neutral particles on heat flux in JT60-U divertor plasma

Poster-2-F3-1 Hisamichi FUNABA

Real-Time Monitoring of Electron Temperature and Density Profiles by Thomson Scattering on LHD

Poster-2-F3-2 Yuho SHOJI

Effects of anisotropic triton birth profile on triton burn-up ratio in LHD plasma

Poster-2-F3-3 Hiroki ISHIGURO

Effects of Toroidal Field Ripple on Toroidal Torque by Electron Cyclotron Heating in JT-60U Plasma

Poster-2-F3-4 Yi PENG

Theoretical Investigation on Double-Pass Configurations for the Thomson Scattering Measurements

Poster-2-F3-5 Ryoma YANAI

Upgrading LHDGauss code by including obliquely propagating wave absorption effect for ECH

Poster-2-F3-6 Tokihiko TOKUZAWA

ECE Radiometer system with upgrades for various magnetic field strength experiments in LHD

Poster-2-F3-7 Wenqing HU

Time-dependent Density Fluctuation Analysis for Confinement Transition Event in LHD with Beam Emission Spectroscopy Measurement

Poster-2-F3-8 Kotaro IWASAKI

Measurements of Ion Temperature and Flow during IRE by a Visible Spectrometer

Poster-2-F3-9 Mayuko KOGA

Study of Microwave Holography Reconstruction by using Convolutional Neural Network

Poster-2-F3-10 Daichi KOBAYASHI

Energy Flow in Super Alfvénic/Sonic Collisional Merging Process of Field-Reversed Configurations

Poster-2-F3-11 Kiyofumi MUKAI

Toroidal asymmetry of divertor heat load reduction in N_2 or N_2 established plasmas on LHD

Poster-2-F3-12 Hiroki HASEGAWA

Ion Inertial Effects on Plasma Filament Propagation

Poster-2-F3-13 Yutaka FUJIWARA

Effect of Electron Temperature on Fast-ion Distribution with Fast-ion D alpha diagnostic in the Large Helical Device

Poster-2-F3-14 Arseniy A. KUZMIN

Ro-vibrational population distribution in the ground state of hydrogen and deuterium molecules in LHD peripheral plasma deduced from emission spectroscopy

Poster-2-F4-1 Shinsaku IMAGAWA

Parameter study on Nb3Sn cable-in-conduit conductors for DEMO magnets

Poster-2-F4-2 Hiroaki OHTANI

Inspection of Maintenance Process of Fusion Reactor by Virtual-Reality Technology

Poster-2-F4-3 Piero AGOSTINETTI

Conceptual design of the beamline for the DTT Neutral Beam Injector

Poster-2-F4-4 Masahiro TANAKA

Detection of ammonia and deuterated hydrocarbons in the exhaust gas during wall conditioning operation by infrared absorption spectroscopy

Poster-2-F4-5 Arata KANEKO

Measurement of deuterium retention and permeation for tungsten exposed to D-He mixed plasma and detached deuterium plasma

Poster-2-F4-6 Shuichiro MIURA

Irradiation hardening behavior of He-irradiated vanadium alloys with low Ti addition

Poster-2-F4-7 Bui Xuan Nhat SON

Thermocouple Signal Processing for Heat Flux Estimation in Heliotron J

Poster-2-F4-8 Shunya NAKASONE

Simple pretreatment method of tritium measurement for environmental water samples with liquid scintillation counter

Poster-2-F4-9 Hitoshi TAMURA

Structural Design of Magnet System in Helical Fusion Reactor Using Topology Optimization

Poster-2-F4-10 Hideki KAKIUCHI

Development of a new sampler for tritium measurement in the infiltrated soil water

Poster-2-F4-11 Tatsuhiro HOSAKA

Chemical compatibility of reduced activation ferritic martensitic steel F82H with thermal bonding fluids of advanced fusion neutron source (A-FNS)

Poster-2-F4-12 Takuya GOTO

Arc Plasma Irradiation Experiment on a Pebble Flow

Poster-2-F4-13 Naoki HIRANO

Basic Study on HTS Coil Cooling Assist Technology by Magnetic Refrigeration

Poster-2-F4-14 Masaki UEHARA

A Behavior Analysis of a Flexible Payload Constrained to Trajectory using Feedforward Anti-Sway Control Method

Poster-2-F4-15 Maki OTUJI

The cause of Ic deterioration in HTS conductor for fusion devices

Poster-2-F4-16 Yutaro SEKIKAWA

RF acceleration and photo-neutralization for the future negative-ion based NBI system

Poster-2-F4-17 Koki KAWASAKI

Assessment of Diamond Capsule Fabricated by Hot Filament Chemical Vapor Deposition for Direct-Drive Inertial Confinement Fusion

Poster-2-F5-1 Ryosuke NISHIO

Nitrogen Atom Density Measurements from Vacuum Ultraviolet Absorption Spectroscopy and Actinometry in Spiral Shape Plasma

Poster-2-F5-2 Hiroaki NAKAMURA

 $Rovibrational\ Distribution\ of\ Molecular\ Hydrogen\ Isotopes\ Desorbed\ from\ Amorphous\ Carbon$

Poster-2-F5-3 Naomi FURUKAWA

Numerical analysis of quantum mechanical ${m E} imes {m B}$ drift in non-uniform electric fields

Poster-2-F5-4 Keisuke KONUMA

Study on high power helicon wave plasma generation by a variable pitch helical antenna for a thruster

Poster-2-F5-5 Ayane KONDO

Effect of the Additional Electrode on Plasma Diameter in the Linear Plasma Device CTP-HC

Poster-2-F5-6 Kota TAMURA

Quantitative Evaluation of Hydrogen Retention of Solid and Liquid Tin by Thermal Desorption Spectroscopy

Poster-2-F5-7 Minami SUGIMOTO

Estimation of Radial Profile of Electron Density in a Linear Plasma Device NUMBER Using Single Line-of-sight Signal

Poster-2-F5-8 Hideaki MIURA

A study of large eddy simulations of compressible extended MHD model

Poster-2-F5-9 Azusa FUKANO

Electric Potential in Volume Produced Negative Ion Sources with Magnetic Field Increasing toward a wall

Poster-2-F5-10 Atsushi KAMITANI

Acceleration Techniques for Linear-System Solver in Shielding Current Analysis of Cracked HTS Film

Poster-2-F5-11 Hiroki SATO

Application of Contour Dynamics to Vlasov-Poisson Plasma in 1-D Periodic System

Poster-2-F5-12 Hanzheng LI

Simulation of Energetic-Particle-Driven Off-axis Fishbone Instabilities in Tokamak Plasmas

Poster-2-F5-13 Yoshihisa FUJITA

Geometrical Modeling of Fuzzy Structure using Fractal Structures

Poster-2-F5-14 Shu HABU

MD Simulation on Chiral Needle Fabrication in Radiation Force Field of Laguerre-Gaussian Beams

Poster-2-F5-15 Tomoko KAWATE

 $Ion\ Fraction\ Diagnostics\ for\ High-Temperature\ Solar\ Flare\ Plasmas\ via\ UV\ Line\ Spectroscopy$

Poster-2-F5-16 Nagaaki KAMBARA

Density diagnostics of chromospheric evaporation in M1.1 solar flare

Poster 3 [29th, October (Thursday) 14:00-16:00]

Poster-3-F2-1 Daina IIO

Effect of Magnetic Fluctuations on the Toroidal Torque Driven by Electron Cyclotron Heating in Tokamak

Poster-3-F2-2 Toshiki KINOSHITA

Isotope effects on particle transport in LHD

Poster-3-F2-3 Yasuhiro SUZUKI

Implementation of anisotropic plasma pressure to HINT code

Poster-3-F2-4 Yoshihiro ITAKURA

Edge Transport Barrier model for simulating H-mode operation scenario in DEMO with integrated plasma transport code TOTAL

Poster-3-F2-5 Tomoki URAKAWA

Study on diagnostics of anisotropic neutron emission spectrum using spatial neutron flux profile outside vacuum vessel

Poster-3-F2-6 Byron J PETERSON

Design Of An Imaging Bolometer For ITER

Poster-3-F2-7 Tanmay MACWAN

Effect Of External Radial Electric Field On The Drift Tearing Modes Of ADITYA U Tokamak

Poster-3-F2-8 Sora KIMATA

Ion temperature measurement of tokamak plasma in TOKASTAR-2 by Doppler spectroscopy

Poster-3-F2-9 Koyo MUNECHIKA

Visible light tomography considering reflection light in a small tokamak device PHiX

Poster-3-F2-10 Kazuo TOI

Effects of Toroidally Distributed Divertor Biasing on Scrape-Off-Layer Plasma in the QUEST Spherical Tokamak

Poster-3-F2-11 Shin NAITO

Measurement of electron density profiles by using a multi-channel microwave interferometer with a fan-beam arrangement in the PHiX tokamak

Poster-3-F2-12 Yuki HAYASHI

Study on heat pulse transport in detached recombining plasma in linear plasma device Magnum-PSI

Poster-3-F2-13 Naoko ASHIKAWA

Coated Boron Layers by Boronization and a Real-time Boron Coating using Powder Dropping in LHD

Poster-3-F2-14 Yasuko KAWAMOTO

Qualitative Improvement of Z_{eff} Diagnostic Based on Visible Bremsstrahlung Profile Measurement by Changing Observation Cross Section in LHD

Poster-3-F2-15 Kaoru ICHINOSE

The development of Q-band ECEI for LHD

Poster-3-F2-16 Takahiro MORI

Absorption and emission of electromagnetic waves in the magnetospheric plasma device RT-1

Poster-3-F2-17 Toseo MORITAKA

Improved Field Solver for Gyrokinetic Simulation in Stellarator Edge Region

Poster-3-F2-18 Haruhisa NAKANO

Influence of off-axis ECRH on full-power neutral-beam injected high-ion-temperature discharge in Large Helical Device

Poster-3-F3-1 Tetsuo OZAKI

Hot Electron and Ion Spectra in Axial and Transverse Laser Irradiations in the GXII-LFEX Direct Fast Ignition Experiment

Poster-3-F3-2 Takaharu ONISHI

Optimization of shock compression using solid targets

Poster-3-F3-3 Suzuka FUJITA

Radioactive isotope Induced by Beam Loss in Particle Accelerator for Heavy-Ion Inertial Fusion

Poster-3-F3-4 Haruaki TANAKA

Multiple Ion Heating In Early Recennection Phase Induced By Plasmoid Production

Poster-3-F3-5 Ryota TAKENAKA

Validation study of wave calculations for microwave holography reconstruction

Poster-3-F3-6 Md. Anwarul ISLAM

VUV emission spectroscopy for evaluation of optical thickness in He cascade arc plasmas

Poster-3-F3-7 Daisuke TAKADA

Study on Mesh Generation Scheme Based on Structure of Magnetic Field Lines for Large Helical Device

Poster-3-F3-8 SHOGO HATTORI

Time resolve measurement of electron density and temperature by electrostatic probe with conditional averaging method in pulsed capacitively coupled plasma

Poster-3-F3-9 Yasutaka KAWADE

 $Observation\ of\ Microorganisms\ Levitation\ Phenomenon\ in\ an\ RF\ Plasma$

Poster-3-F3-10 Kota YANAGIHARA

Quasioptical simulation of optical vortex beams in plasmas

Poster-3-F3-11 Ryoya NAKAMOTO

Study of beam instability in negative ion pre-sheath region

Poster-3-F4-1 Hirofumi KANNO

Experiment using intensity-improved flux for divertor thermal load reduction by direct energy conversion

Poster-3-F4-2 Yoshimitsu HISHINUMA

Critical current distribution of the RHQT-Nb3Al tape shaped strands for an indirectly cooled Nb3Al conductor

Poster-3-F4-3 Toshiyuki MITO

HTS Magnet and Cryogenic System for Fusion Devices

Poster-3-F4-4 Shinnosuke MATSUNAGA

Conductor Characteristics of the Prototype WISE High-Temperature Superconducting Conductors in the No-Insulation Layer-wound Solenoid Coils

Poster-3-F4-5 Takashi SHIMOZUMA

Design and Construction of a Filter Device of Unwanted Reflected Waves in Oversize Corrugated Waveguides for ECRH

Poster-3-F4-6 Makoto OYA

Simulation of Deuterium Retention in Tungsten under Periodic Deuterium Plasma Irradiation

Poster-3-F4-7 Kazuya TAKAHATA

Development of an Indirectly Cooled Nb3Al Conductor for Superconducting Fusion Magnets

Poster-3-F4-8 Bing MA

Influence of Cu-Y compound content on the microstructure of Cu-Y₂O₃ dispersion strengthened alloys synthesized with the mechanical alloying and HIP process

Poster-3-F4-9 Yuta ONODERA

New HTS conductors testing facility with 4.2 K - 50 K variable temperature insert in 9 T magnetic field

Poster-3-F4-11 Arata NISHIMURA

STUDY ON ASSEMBLY OF TF COIL AND VACUUM VESSEL FOR FUSION DEMO

Poster-3-F4-12 Yuma UENO

THE EVALUATION OF THE AC LOSSES IN THE LARGE-SCALE CONDUCTORS CONSISTING OF STACKED REBCO TAPES

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