Session Program

4–8 Jun 2017

27th IEEE Symposium on Fusion Engineering

T.POS: Poster Session T

Marriott Shanghai City Center
555 Xi Zang Road (Middle), Huangpu District Shanghai 200003 China

Tuesday 6 June

13:40

T.POS: Poster Session T

Poster Session | **Location:** Junior Ballroom

Test results about simple CDA+MIK quench detection method on EAST for ITER Superconducting CS Coils

Speaker
Prof. HU Yanlan

Study of electromagnetic effects induced by huge plasma current variations for EAST CS coils quench detection

Speaker
Mr Teng Wang

Manufacture and Electrical Properties of Instrumentation Wire Extraction Specimens for the ITER Feeder HV Insulation

Speaker
Fang Linlin

The Influences of irradiation defects on mechanical properties for ceramic breeder material Li2TiO3

Speaker
jing wang

The deuterium retention behavior in helium irradiated tungsten after plasma exposures in EAST

Speaker
Mingzhong Zhao

Some Properties of Beryllium Pebbles Produced by Powder Metallurgy for HCPB Breeding Blanket Application

Speaker
Igor Kupriyanov

Development of Neural-Network Potentials for Atomistic Modelling of PWI

Speaker
Mrs Lei Chen

Simulation of turbulent plasma heat flux to the DEMO first wall

Speaker
Dr Sergey Pestchanyi

RIPER: An irradiation facility to test Radiation Induced Permeation and Release of deuterium for fusion reactor materials.

Speaker
Dr Alejandro Morono

Prediction of departure from nuclear boiling in the first wall of WCCB blanket for CFETR

Speaker
Dr Kecheng Jiang

Flow Test at Factory for ITER Thermal Shield

Speaker
Dr Kwanwoo Nam

Application of automatic ultrasonic testing system based on joint robot in Fusion Engineering

Speaker
Dr rui wang

Repair of the cracked surface of W using high energy pulsed laser

Speaker
Mr Dahuan Zhu

Analysis on Phase array ultrasonic signals of the ITER PF jacket inspection

Speaker
Ms xiaochuan Liu

Advanced shape design with F2EQ code in CFETR

Speaker
Dr Zhengping Luo

INTEGRATION OF METALLIC SEALS ON CIRCULAR FLANGES FOR NEUTRAL BEAM FRONT END COMPONENTS

Speaker
Mr Marc Urbani

Experimental Study on the Liquid Lithium Film Flow characteristics under Spanwise direction Magnetic field

Speaker
Prof. Ni Ming-Jiu

ESTIMATION OF STRAY CAPACITANCES OF TWIN SOURCE HVDC TRANSMISSION LINE AND ITS STORED ENERGY

Speaker
Mr Vishnudev M N

A numerical model of RF ion source for the ITER-relevant NBI

Speaker
Dr Xingquan Wu

Transport analysis of EAST long-pulse H-mode discharge with Integrated Modeling

Speaker
Mr Muquan Mu

The offline simulation module of J-TEXT Real-Time Framework

Speaker
Mr Yang Li

Comparison of radiative divertor behavior in Ar and Ne seeded plasmas in EAST

Speaker
Mr Jingbo Chen

R&D of linear plasma facilities for PMI research at ASIPP

Speaker
Dr H.-S. Zhou

The Design of a 70kA/20kV Two-section Pyrobreaker for Quench Protection

Speaker
Mr Jun He

An Integration method of Hybrid Power Filter for Specific Harmonic Suppression in Tokamak Power System

Speaker
Mr Jing Lu

Research on the Method of Reactive Power Detection for Tokamak Coil Power Supply Based on AC/DC System Active Power Balance

Speaker
Mr Yanan Wu

Application of the voltage control mode of second-generation EAST active feedback power supply

Speaker
Prof. haihong huang

Physics and Geometry Design of Lower Divertor Upgrade in EAST Tokamak

Speaker
Houchang Xu

Design and implement of Varying Frequency Three-phase Synchronous Signal processing system Based on modern signal processing

Speaker
Dr Weibin Li

IPSE DIXIT: A User-Friendly Software Tool for the Design and Operation of Tokamak Power Supplies

Speaker
Alessandro Lampasi

The Analysis of Socio-economic Impact on Big Science R&D: Focusing on Fusion R&D Program in Korea

Speaker
Wonjae Choi

Structural Integrity Report of Neutron Flux Monitor at occluded EqP#07 (PBS 55.B4.D0)

Speaker
Mr Jun Li

Application of ZD REDOX Detection Technology for Measuring Hydrogen Isotopes in Tritium Extraction System

Speaker
Mr xiao chengjian

Curent Status Concerning Tritium Removal Technology and its Implementation at Cernavoda NPP(ROMANIA)

Speaker
Dr Gheorghe Ionita

The Protection Strategy Design and Implementation for ITER PF Converter System

Speaker
Dr Liansheng HUANG

A digital signal processing system of digital Rogowski current transducer with comb filter

Speaker
Mr Zhen Zhang

Measurement system of PSM HVPS for neutral beam injection on HL-2A

Speaker
yali wang

A Maxmium Current Control Strategy for Three-phase PWM Rectifier for the ITER In-Vessel Vertical Stability Coil Power Supply

Speaker
Mr Kun Qian

NUMERICAL STUDY OF INTERATION BETWEEN THERMAL STRESS OF THE FIRST WALL AND COOLANT DUCT BY LIQUID-SOLID COUPLED METHOD IN FUSION REACTOR BLANKET

Speaker
Hongyan WANG

The vacuum ultraviolet imaging system and its application on EAST

Speaker
Dr Tingfeng Ming

DESIGN OF A HIGH RESOLUTION PROBE (HRP) HEAD FOR ELECTROMAGNETIC TURBULENCE INVESTIGATIONS IN W7-X

Speaker
Piero Agostinetti

Cooling Needs and Thermal Hydraulic Design Studies of Diagnostic Shielding Module of US ITER Port Plugs

Speaker
Dr Yuhu Zhai

DEVELOPMENT OF RADIATION HARD AND MAGNETIC FIELD COMPATIBLE VACUUM GAUGES FOR THE ITER PROJECT

Speaker
Bastien Boussier

Inertia load analysis of ITER equatorial and upper port plug EPP9 and UPP14

Speaker
Mrs Han Zhang

Diversification of the position sensing instrumentation for the JET neutral beam calorimeters

Speaker
Mr Peter Blatchford

Study on dynamic behavior of EAST upper divertor with vertical displacement events

Speaker
Mr Xinyuan Qian

Heat transfer and Structural analyses of a water cooled tube under one-sided heating conditions for fusion reactor divertor

Speaker
Ms Liu Ping

Charactarization of Low Energy Plasmas in the device PG-QRO-1

Speaker
Dr Gonzalo Ramos

Structural design and analysis of the feeder in the CFETR CS model coil

Speaker
Liang Guo

Electrical and Magnetic Analyses and Design of New NSTX-U PF1A Coil

Speaker
Zhi Gao

Experimental Study on Multilayer Liquid Metal Film Flow Characteristics under Horizontal Magnetic field

Speaker
Dr Yang Juan-Cheng

Thermomechanical Assessment of the K-DEMO Divertor Target Applying CuCrZr and RAFM as Heat Sink Materials

Speaker
Dr Sungjin Kwon

Analysis and experimental study of impedance matching characteristic of RF ion source on neutral beam injector

Speaker
Dr Caichao Jiang

Application of laser-induced breakdown spectroscopy (LIBS) for in situ characterization of lithium deposition layer on EAST tokamak

Speaker
Dr Zhenhua Hu

Structural Stress Analysis of the CFETR CS Model Coil

Speaker
Aihua Xu

Optimization and Design of Divertor Langmuir Probe Diagnostic System on the EAST Tokamak

Speaker
Mr Jichan Xu

Research and design of microwave diagnostics on CFETR

Speaker
Mr Hao Qu

Design of a robust linear and rotary sensor compatible with hostile environmental conditions

Speaker
Dr Carlo Neri

Upgrade of data acquisition and control system for microwave reflectometry on EAST

Speaker
Dr Fei Wen

Design and Analysis Progress of US ITER Integrated Diagnostic Equatorial Port 09

Speaker
Dr Yuhu Zhai

Thermal-hydraulic analysis of high temperature superconducting magnets in CFETR

Speaker
Dr Junjun Li

Computational study of the elastic modulus of mixed pebble beds for WCSB

Speaker
Mr Yuanjie Li

Ultrafine Pt nanoparticles on superhydrophobic 3D graphene aerogel for hydrogen-water exchange reaction

Speaker
Dr Xiaolong Fu

The influence of heat transfer on MHD flow in the blanket at high Hartmann Number

Speaker
Jiajia Han

Performance analysis on the VUV imaging system in EAST tokamak

Speaker
Ms Zhijun Wang

3D numerical simulations of hypervapotron geometry on Thermalhydraulic Performance

Speaker
Mr Ran Wei

Design of the optical emission spectroscopy diagnostic system and preliminary experimental results in RF negative ion source

Speaker
yan wang

Preliminary mechanism analysis of HyperVapotron experiment for high heat flux components

Speaker
Delin Chu

NBImag: a useful tool in the design of magnetic systems for the ITER Neutral Beam Injectors

Speaker
Daniele Aprile

Multiphysics Modeling of the FW/Blanket of the U.S. Fusion Nuclear Science Facility (FNSF)

Speaker
Yue Huang

0-D Physical Design for the Heating and Current Drive System of CFETR

Speaker
Dr Defeng Kong

Design and Analysis of CFETR CSMC Cooling Loop

Speaker
Dr Qiangwang Hao

Experimental study on vacuum control method for Paschen tests of the superconducting magnet

Speaker
Dr Zhirong Zhang

Investigation on the Effect of Tritium Production using Temperature Control for DEMO Blanket

Speaker
Mr Yang Qiu

Design and Analysis of “Filling-Evacuating” High-Pressure Helium-Cooled Loop

Speaker
Dr Haifei Deng

Analysis and derivation of the EU-DEMO high level plant requirements

Speaker
Matti Coleman

PRELIMINARY DESIGN FOR THE FIRST WALL IN WEAK MAGNETIC SIDE OF HL-2M PROJECT

Speaker
Dr Tao Lin

A New User Front-End for EAST Remote Participation

Speaker
Dr Xiaoyang Sun

Degradation of Neutral Beam heating & current drive by Alfvénic instabilities

Speaker
Mario Podesta

Power control system of 4.6GHz Lower hybrid wave for experimental advanced superconducting tokmak

Speaker
Mr Wendong Ma

Preliminary Cooling Channel Design and Thermal-hydraulic Analysis of GDC PE in UPP14

Speaker
Yong LU

A flexible web visualization framework for nuclear fusion experiment data

Speaker
Kuanhong Wan

Thermal hydraulic analysis for one water cooled blanket module of CFETR based on RELAP5

Speaker
Mr Shuang Lin

Pebble Bed Thermo-mechanical Modeling for Water Cooled Ceramic Breeder Blanket for CFETR

Speaker
Mr Lei Chen

Multi-scenario evaluation and electromagnetic loads on CFETR VV mockup during MD event

Speaker
Dr Ni Xiaojun

Electromagnetic Analysis of the ITER Glow Discharge Cleaning Electrode in Equatorial Port No.12

Speaker
Dr Lijun Cai

Modeling and analysis on the six-phase generator - converter system as the magnetic field power supply of HL-2A/M

Speaker
Dr Xiaolong Liu

Establish full covering liquid metal film flows under poor wettability conditions for liquid divertor of fusion reactor

Speaker
Dr Xiujie Zhang

Design and Fabrication Process of Toroidal Field Coil for HL-2M

Speaker
Mr Yin Qiu

Analysis of non-inductively high-performance discharges

Speaker
Ms Qin Hang

Fast Boundary Reconstruction from Tangentially Viewed Visible Images for Plasma Control in EAST

Speaker
Mr Heng Zhang

Design and Installation of Small Angle Slot (SAS) Divertor in DIII-D

Speaker
Chris Murphy

Pumping Performance Calculation of HL-2M in-vessel Cryopump based on Monte Carlo method

Speaker
Mr Yong Li

Development of Rotational Speed Control Equipment And Brake Equipment for 300MVA Pulse Generator

Speaker
Mr Haibing Wang

DESIGN OF CURRENT-PULSE POWER SUPPLY FOR TEARING MODE CONTROL ON THE J-TEXT TOKAMAK

Speaker
Dr Li Mao

Experimental Investigation on the Second Commutating Process of a Quench Protection Switch

Speaker
Mr Sheng Li

Recent progress of pellet injection system in Experimental Advanced Superconducting Tokamak

Speaker
Dr Xingjia Yao

The Disturbance Analysis for Ultrasonic Doppler Profile Measurements Through Numerical Simulation

Speaker
Dr wangli huang

Application of PAUT in CFETR vacuum vessel austenitic stainless steel welding R&D

Speaker
wang rui

Three confinement systems - Spherical Tokamak, Advanced Tokamak and Stellarator: A comparison of key component cost elements

Speaker
Mr Thomas Brown

A Method to Alleviate the Long History Problem Encountered in Monte Carlo Simulations via Weight Window Variance Reduction

Speaker
Dr jia li

Thermo-Hydraulic Performance Testing for Plasma Facing Components by 3D Metal Printing Technology

Speaker
Dr Suk-Kwon Kim

Micro perspective on anti-fatigue performance enhancement of PFC metal welding interface with MD simulation

Speaker
Mr Xuan Wang

Comparison of Deformation Models of Flexible Manipulator Joints for use in DEMO

Speaker
Dr Ming Li

Study of plasma density effects on the divertor power width of EAST by SOLPS5.0/B2.5-Eirene

Speaker
Mr Guozhong Deng

Endoscope Emulator Test Stand for ITER Dust Monitor Diagnostic

Speaker
Evgeny Veshchev

STOCHASTIC COST ANALYSIS OF STEADY STATE AND PULSED DEMO-LIKE FUSION POWER PLANTS

Speaker
Prof. Giuseppe Zollino

Evaluation of the distribution of C5+ and Li2+ by the VUV imaging system on EAST

Speaker
Mr Fan Zhou

Study of fire impact on detritiation of atmosphere in tritium handling facility: catalytic oxidation of fume gas produced by cable burning

Speaker
Mr Mikhail Rozenkevich

Qualification of ITER PF6 Helium Inlet

Speaker
Mr shuangsong Du

REFMULF: 2D Full-wave FDTD Full Polarization Maxwell Code

Speaker
Dr Filipe da Silva

Shutdown Dose Rate Calculation for the Preliminary Concept of K-DEMO Equatorial Port Area

Speaker
Jongsung Park

15:40