Session Program

4–8 Jun 2017

27th IEEE Symposium on Fusion Engineering

W.POS: Poster Session W

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

Wednesday 7 June

13:40

W.POS: Poster Session W

Poster Session | **Location:** Junior Ballroom

Design of the Alfvén Eigenmodes excitation power supply on J-TEXT

Speaker
Mr Song Zhou

VARID: Virtual and Augmented Reality Integrated Development Facility for Research in Remote Handling and Maintenance of Tokamaks

Speaker
Mr Pramit Dutta

Design of 11 MA Snowflake divertor configurations of CFETR

Speaker
Mr Hang Li

Study of a plasma boundary reconstruction method based on reflectometric measurements for control purposes

Speaker
Dr Giuseppe Marchiori

Plasma Control Requirements for Commercial Fusion Power Plants: A Quantitative Scenario Analysis with a Dynamic Fusion Power Plant Model

Speaker
Shutaro Takeda

Neutronic study and shielding performance analyses for CFETR blankets

Speaker
Ms Shuling Xu

Application of Gaussian Processes for predicting tritium breeding ratio in the helium cooled pebble bed breeder blanket

Speaker
Dr Shimwell Jonathan

Analysis of Dogleg Duct Experiments with 14 MeV Neutron Source Using TRIPOLI-4 Monte Carlo Transport Code

Speaker
Dr Mingzhun LEI

The analysis of shielding performance for toroidal field coils of CFETR

Speaker
Mr Wei Shi

Neutronics Analysis of Helium Cooled Ceramic Breeder Blanket with S-shaped Lithium zone and Cooling Pipes for CFETR

Speaker
Mr Yudong Lu

MOLECULAR DYNAMICS STUDY ON EFFECT OF GBS MISORITENTION ANGLE ON GBS HELIUM EMBRITTLEMENT IN BCC IRON

Speaker
Jingyi Shi

Assessment of Cavitation Erosion Risk in the Liquid-Lithium Flow in IFMIF-DONES

Speaker
Dr Sergej Gordeev

Irradiation effects on lifetime of first wall structure materials for CFETR

Speaker
Prof. Lei Peng

Profile Tolerances influence on Cryostat Base Section

Speaker
Mr SARBJEET SINGH SANDHU

The LIPAc Beam Dump

Speaker
Dr Beatriz Brañas

Boron Carbide Coating on Tungsten By ICP Thermal Spraying

Speaker
Ms Qiujiao Zhou

Hydrogen Effects on Properties of ICP Sprayed Boron Carbide Coatings

Speaker
Mr Qijia Guo

Modeling and Qualifying Operational and Cooldown Strains of the NSTX-U PF1a Coils

Speaker
Mr Peter Titus

Studies on DEMO Toroidal Field Circuit

Speaker
Alberto Maistrello

Monitoring, Modeling, and Protecting Against Insulation Failures in the NSTX-U TF Outer Legs

Speaker
Mr Peter Titus

Challenges for the Wendelstein 7-X magnet systems during the next operation phase

Speaker
Dr Thomas Rummel

Qualification of ITER Correction Coil Superconductor Joint

Speaker
Mr Lin Wang

Design and Analysis of Magnet System for Flili Testbed in EAST

Speaker
Mr Lexing Hu

Research and Analysis on Electrical Performance of EAST Cryogenic Axial Insulation Breaks

Speaker
Mr Cheng Wu

Structural Concept Design Of CFETR CS Model Coil

Speaker
Dapeng Yin

Winding Design for CFETR Central Solenoid Model Coil

Speaker
Houxiang HAN

CURRENT STATUS OF THE EU DEMO VACUUM SYSTEMS

Speaker
Christian Day

A new concept to achieve a higher fuel burn-up fraction in a DEMO reactor

Speaker
Dr Yuri Igitkhanov

ZrCo bed as Protium and Deuterium storage material

Speaker
Mr Xingbo Han

PHYSICS OF THE HIGH FIELD ULTRA LOW ASPECT RATIO TOKAMAK

Speaker
Dr Celso Ribeiro

Engineering overview of the Fusion Research in Costa Rica: SCR-1 Stellarator and Spherical Tokamak MEDUSA-CR

Speaker
C. Otarola

Improved thermal performance of an updated NSTX-U inner divertor

Speaker
Mr Sibilia Marc

Preliminary progress of the divertor module in CFETR system code

Speaker
Mr Jianwu Zhang

The influence of ELMs on low cycle fatigue behavior of ITER-like divertor target

Speaker
Prof. Shenghong Huang

Cooling concepts for CFETR divertor target

Speaker
Dr Xuebing PENG

Liquid metal natural convection research heat transfer in the presence of a transverse magnetic field

Speaker
Prof. Wang Z H

Advanced Plasma Diagnostic Analysis using Neural Networks

Speaker
Kevin Tritz

An Overview of NSTX-U Diagnostics

Speaker
Mr Robert Ellis

Design of a dual-band IR imaging system for surface temperature measurements on the tungsten divertor in EAST

Speaker
kaifu gan

Preliminary Design of Laser-Induced Breakdown Spectroscopy Diagnostic for Divertor Analysis in EAST

Speaker
Dr Cong Li

First measurement of LiIII charge exchange line on EAST tokamak

Speaker
Dr yingying li

Developing the Simulation of Spectra Code Based on HL-2A tokamak Motional Stark Effect and Beam Emission Spectroscopy

Speaker
Mr Y.C CHEN

Use Spectrum Simulation Code SOS to test the performance of the Fast ion D-alpha spectrum on HL-2A

Speaker
Dr P. Chen

A preliminary consideration of CFETR diagnostic system

Speaker
Yao Yang

Evaluation of spatial resolution of neutron profile monitor in LHD

Speaker
Mr Hiroki Kawase

Prototype design of a 700 C in-vacuum blackbody source for in-situ calibration of the ITER ECE diagnostic*

Speaker
Dr Andrei Khodak

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

Speaker
yan wang

Steady State and Transient Thermal Analysis of the Updated Helium Cooled Solid Breeder Blanket for CFETR

Speaker
Dr Guangming Zhou

Effects of the J-TEXT TBM mock-up on the equilibrium magnetic field and error field

Speaker
Dr Zhengqing Zhang

Investigation of the contact resistance between the pebble beds and the box wall surface in the gas flow condition

Speaker
Seong Dae Park

Evaluation of tritium inventory and permeation in water-cooled ceramic breeder blanket for CFETR

Speaker
Dr Kai Huang

Corrosion test results of ARAA and FMS steel in the Experimental loop for liquid breeder

Speaker
Dr Jae Sung Yoon

Coupling analysis of the HCCB blanket under electromagnetic, thermal and mechanical loads

Speaker
Mr Ming Wang

Effect of coolant mass flow rate on flow pulsation in a simplified channel system of CFETR WCCB blanket

Speaker
Dr Min Li

Classification of TBM components for construction code application

Speaker
Mr Dong Jun Kim

Dynamics and control of droplet splashing from tungsten divertor materials generated by ELM-like heat loads

Speaker
Dr M Nagata

ACTIVE RECYCLING CONTROL THROUGH LITHIUM INJECTION IN EAST

Speaker
John Canik

Deuterium retention in tungsten exposed to KSTAR plasmas

Speaker
Dr Jing Wu

Impact of plasma configuration on impurity and density control during long pulse discharges in EAST

Speaker
Mr Hongmin Mao

DEVELOPMENT AND VERIFICATION OF COMPUTATIONAL MODEL FOR CONTROL OF PLASMA AND HALO CURRENT IN EAST TOKAMAK

Speaker
Dr Mahmood Ul Hassan

Deuterium permeation and retention behavior in a martensitic/ferritic steel

Speaker
Hao-Dong Liu

Personnel Safety at Magnetic Fusion Experiments

Speaker
Lee Cadwallader

Recent improvement of the design of the ITER steady-state magnetic sensors

Speaker
Slavomir Entler

Study of pumping speed of Activated Carbon based Cryosorption Pump

Speaker
Dinesh Hosamani

Numerical analysis of fracture behavior of first wall subjected to electromagnetic force during plasma disruption

Speaker
Prof. Cuixiang Pei

Multi-design Innovative Cooling Research & Optimization (MICRO): a novel set of optimized solutions for enhanced heat transfer in DEMO

Speaker
Mr Giulio Gambetta

Hydrogen isotope permeation through tungsten deposition layer formed on Ni plate by plasma sputtering method

Speaker
Mr Daisuke Mori

Study on helium-induced hardening due to interaction between helium bubbles and edge dislocation by molecular dynamics simulation

Speaker
Xing Liu

Manufacturing design assessment of the welded in-wall shield rib for ITER

Speaker
Ms YuGyeong Kim

Observation scenario of knock-on-tail shape using Doppler-broadening

Speaker
Ms Yasuko Kawamoto

Concept of the integrated environment of management by large scientific projects

Speaker
Subbotin Mikhail

High Priority Prototype Testing in support of System Level Design development of the ITER Radial Neutron Camera

Speaker
Dr Marco Riva

The SF6 Gas Handling and Storage Plant of the MITICA test facility

Speaker
Dr Loris Zanotto

The management and storage of EAST diagnostic data

Speaker
Mr Feng WANG

Swirl tube design of the pole shiled in the magnet for the long pulse upgrades of EAST-NBI based on the subcooled boiling

Speaker
Dr ling Tao

Hydrogen isotopes plasma-driven permeation through sputter-deposited tungsten coated F82H

Speaker
Dr Yue Xu

Deuterium transport and retention in a liquid metal Gallium under steady state plasma bombardment

Speaker
Mr Halin Bi

Development of I&C main functions for ITER VUV spectrometers and prototype test at KSTAR

Speaker
YoungHwa An

Research on Synchronous Data Network of J-TEXT Plasma Control System

Speaker
Yuan Pan

An Active Gate Control for Press-Pack IGBTs in Series applied for high-voltage switch

Speaker
Mr Dongyu Wang

Design and optimization of the CFETR breeding blanket with S-type cooling pipes in BU

Speaker
chenyu xu

Cryopump development of the 5MW NBI system on HL-2M tokamak

Speaker
Mr Xianfu Yang

Measurements and model calculations of activation reaction rate for (n,p) reaction on 54Fe isotope

Speaker
Ms Wuhui Chen

Modeling of pre-Thermal Quench and Thermal Quench stages of disruption induced by Massive Gas Injection in ITER

Speaker
Dr Vladimir Leonov

Web Services for 3D MHD Equilibrium Data at Wendelstein 7-X

Speaker
Mr Michael Grahl

TCAP hidrogen isotope separation process under development at ICSI Rm. Valcea

Speaker
Dr George Ana

Inspection Method for Delamination Defect in First Wall Panel of Tokamak Device by using Laser Infrared Thermography Technique

Speaker
Mr Haochen Liu

Progress on the Design Development for Hard Core Components (HCC) for ITER Diagnostic System

Speaker
Mr Jorge Rafael Gonzalez Teodoro

Designing for Tokamak Emergent Behaviour using a Hierarchical Systems Engineering Architecture Design Process

Speaker
Mr Rob Ellis

Engineering Design Modules on CFETR Integration Design Platform

Speaker
Mr Yang Li

A New Parallel IGBT Current Sharing Control for Tokamak Vertical Stabilization Current Supply System

Speaker
Lu Yue

Final acceptance test of the Ion Source and Extraction Power Supplies for the SPIDER experiment

Speaker
Andrea Zamengo

The Proposed Improvement for Neutral Beam Injection Power Supply System

Speaker
Mr Austin Lowder

3MW Dual Output High Voltage Power Supply Operation: Results for Accuracy, Stability and Protection Test

Speaker
Mr AMIT PATEL

Design & Development of High Voltage Power Suppliy for Negative Ion Source

Speaker
Meichu Huang

Design of High Precision Power Supply Control System for ITER Platform

Speaker
Mr Peng Ju

Design of a high power and low parasitic inductance resistor

Speaker
Mr Xinke Ji

A Novel Power Supply Design for Multistage Depressed Collector Gyrotrons

Speaker
Simon Keens

A ZCS AC/DC Converter with LCL

Speaker
Qin Hang

Type Tests of JT-60SA Central Solenoid / Equilibrium Field (CS/EF) Super-Conducting Magnet Power Supplies

Speaker
Dr Pietro Zito

Anisotropic neutron emission spectrum and its utilization for verification of nuclear elastic scattering effect in proton-beam-injected deuterium plasmas

Speaker
Prof. Hideaki Matsuura

GPU parallel Grad-Shafranov solver for real-time equilibrium reconstruction

Speaker
Yao Huang

Innovative H&CD designs and the impact of their configurations on the performance of the EU DEMO fusion power plant reactor

Speaker
Mr Thomas Franke

Structural and thermal analysis of a distributed ICRF antenna integrated in European DEMO blanket

Speaker
Amro Bader

Design and setup of the High Voltage Radio Frequency Test Facility for the characterization of the dielectric strength in vacuum of RF drivers for Neutral Beam Injectors Ion Sources

Speaker
Alberto Maistrello

Development of off-axis beamline for KSTAR

Speaker
Dr Sangwook Jung

Design and optimization of cooling channels for 4-strap ICRF antenna of EAST

Speaker
Song Wei

Signal transmission links for the electron cyclotron resonance heating system on J-TEXT

Speaker
Mr Fangtai Cui

Control system designed for the electron cyclotron resonance heating system on J-TEXT

Speaker
Mr Z.X. Yu

An Equation of State and Compendium of Thermophysical Properties of Liquid Tin, a Prospective Plasma-Facing Material

Speaker
Dr Paul W. Humrickhouse

Performance of full compositional W/Cu functionally gradient materials under quasi-steady state heat load

Speaker
Baoguo Wang

Design of the dimensional metrology and alignment scheme for the 1/32 CFETR VV Mock-up

Speaker
Mr Yongqi GU

15:40