

12th IAEA Technical Meeting on Control, Data Acquisition and Remote Participation for Fusion Research

Monday 13 May 2019

Plenary Oral: Control Systems (09:20-10:40)

| time | [id] title | presenter |
|-------|---|---------------------|
| 09:20 | [528] ITER Operation Application Systems for plant system integration and commissioning | PARK, Mikyung |
| 09:40 | [488] EAST research activities on control and data toward CFETR | Prof. XIAO, Bingjia |
| 10:00 | [443] Design and Development of a Cost Optimized Timing System for Steady state Superconducting Tokamak (SST-1) | Mr DHONGDE, Jasraj |
| 10:20 | [531] Introduction of ITER CODAC Relevant Technologies on JET and MAST | Dr WATERHOUSE, John |

Plenary Oral: Plasma Control 1 (11:10-12:30)

| time | [id] title | presenter |
|-------|---|--------------------|
| 11:10 | [511] Advances and challenges in KSTAR plasma control toward long-pulse, high-performance experiments | Dr HAHN, Sang-hee |
| 11:30 | [497] Current State of DIII-D Plasma Control System | MARGO, Martin |
| 11:50 | [466] The first implementation of active divertor heat flux feedback control in EAST PCS | Dr YUAN, Qiping |
| 12:10 | [482] MARTe2 and MDSplus integration for a comprehensive Fast Control and Data Acquisition System | MANDUCHI, Gabriele |

Tuesday 14 May 2019**Plenary Oral: Neural Network Methods (09:00-10:00)**

| time | [id] title | presenter |
|-------|--|--------------------------|
| 09:00 | [513] Automatic recognition of anomalous patterns in discharges by recurrent neural networks | FABREGAS ACOSTA, Ernesto |
| 09:20 | [484] Automatic recognition of plasma relevant events: implications for ITER | Dr VEGA, Jesús |
| 09:40 | [456] Disruption Predictor Based on Neural Network and Anomaly Detection | Dr ZHENG, Wei |

Plenary Oral: Plasma Control 2 (11:00-12:40)

| time | [id] title | presenter |
|-------|--|-----------------------|
| 11:00 | [459] Fast scenario design for alternative magnetic diverted discharge on EAST | LUO, Zhengping |
| 11:20 | [518] Rapid prototyping of advanced control schemes in ASDEX Upgrade | SIEGLIN, Bernhard |
| 11:40 | [527] Real-time MHD Analysis Computer System Design, Architecture, and Integration with PCS | ERICKSON, Keith |
| 12:00 | [530] Integrated Data Acquisition, Storage and Retrieval for Glass Spherical Tokamak (GLAST) | JAVED, Muhammad Aqib |
| 12:20 | [485] From Tore Supra to WEST : Evolution of CODAC infrastructure | Mr SANTRINE, Benjamin |

Wednesday 15 May 2019**Plenary Oral: MCR & DTI (09:00-10:30)**

| time | [id] title | presenter |
|-------|--|----------------------|
| 09:00 | [529] State-full Asynchronous Event Server and Clients | DUVAL, Basil |
| 09:20 | [503] Application of LHD Post Data Analysis Systems to the KSTAR Project | EMOTO, Masahiko |
| 09:40 | [523] Design for the Distributed Data Locator Service for Multi-site Data Repositories | NAKANISHI, Hideya |
| 10:00 | [445] Control system of Neutral Particle Analyser in energy sweeping mode. | Dr DREVAL, Mykola |
| 10:15 | [510] Design of the Interlock System for MITICA | Mr LUCHETTA, Adriano |

Plenary Oral: PC3, MCR & DTI (11:00-12:20)

| time | [id] title | presenter |
|-------|---|------------------------|
| 11:00 | [441] An efficient MHD equilibrium solver for control oriented transport models | GARCIA-MARTINEZ, Pablo |
| 11:20 | [471] Validation of the Fenix ASDEX Upgrade flight simulator | Dr JANKY, Filip |
| 11:40 | [524] Navigational Data Management - A general approach to representation and exploitation of relationships in scientific data sets | Mr STILLERMAN, Joshua |
| 12:00 | [498] Dockerizing MDSplus for use with custom data collection devices | LANE-WALSH, Stephen |

Plenary Oral: DASP Systems (14:00-14:40)

| time | [id] title | presenter |
|-------|---|-----------------|
| 14:00 | [457] A full stack data acquisition, archive and access solution for J-TEXT based on Web technologies | Mr WANG, Yuxing |
| 14:20 | [451] Strategy for diagnostics integration into W7-X CoDaC for OP2 | Dr WINTER, Axel |

Thursday 16 May 2019

Plenary Oral: DASP (09:00-10:00)

| time | [id] title | presenter |
|-------|--|--------------------|
| 09:00 | [490] Methodology to standardize the development of FPGA-based intelligent DAQ and processing systems on heterogeneous platforms using OpenCL | Mr ASTRAIN, Miguel |
| 09:20 | [508] Design of GPU-based Parallel Computation Architecture of Thomson Scattering Diagnostic in KSTAR | LEE, Seung-Ju |
| 09:40 | [522] Recent Diagnostic Developments with the ASDEX Upgrade Standard Data Acquisition System using the FPGA implemented Serial I/O card „SIO2“ | Dr BEHLER, Karl |

Plenary Oral: RPVL (11:05-11:45)

| time | [id] title | presenter |
|-------|--|--------------------------------------|
| 11:05 | [468] Remote Experiment with WEST from ITER Remote Experiment Centre | TOKUNAGA, Shinsuke |
| 11:25 | [483] RUSSIAN PROTOTYPE OF ITER REMOTE PARTICIPATION CENTER | Dr SEMENOV, Igor Mr SEMENOV, Oleg |