## 25th IAEA Fusion Energy Conference - IAEA CN-221

## Friday, 17 October 2014

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| [594] MHD-PbLi Facility for Experiments at Real Blanket Relevant<br>Thermo-Hydraulic Conditions   | Dr PLATACIS, Ernest  |       |
| [74] Accurate Estimation of Tearing Mode Stability Parameters in the KSTAR Using High-Resolution 2-D ECEI Diagnostic  | Prof. PARK, Hyeon K. |       |
| [714] A 3D Nonlinear Simulation Study of the $L \rightarrow H$ Transition Criterion   | Mr PARK, Gunyoung    |       |
| [713] First Direct Evidence of Turbulence-Driven Ion Flow Triggering the L- to H-Mode Transition  | Mr SCHMITZ, Lothar   |       |
| [712] Mechanism of Low-Intermediate-High Confinement Transitions in<br>Tokamaks   | Mr DONG, Jiaqi       |       |
| [711] Experimental Turbulence Studies for Gyro-Kinetic Code Validation Using Advanced Microwave Diagnostics   | Mr STROTH, Ulrich    |       |
| [293] Development and Successful Operation of the Enhanced-Interlink System of Experiment Data and Numerical Simulation in LHD  | Dr EMOTO, Masahiko   |       |
| [192] Progress of CEA Contributions to the JT-60SA TF Coil Procurements   | Dr DECOOL, Patrick   |       |
| [271] Perspectives for the High Field Approach in Fusion Research and Advances within the Ignitor Program   | SUGIYAMA, Linda      |       |
| [523] Plasma Rotation Alteration by Non-Axisymmetric Magnetic Fields, Resistive MHD Stability Analysis, and High Normalized Beta Plasmas Exceeding the Ideal Stability Limit in KSTAR | Dr PARK, Young-Seok  |       |
| [446] The Isotope Effect in GAM – Turbulence Interplay and Anomalous<br>Transport in Tokamak  | Dr GURCHENKO, Alexey |       |
| [101] Toroidal Rotation and Momentum Transport Studies in KSTAR Plasmas   | Dr LEE, Sang Gon     |       |
| [435] Conceptual Design of High Resolution and Reliable Density Measurement<br>System on Helical Reactor FFHR-d1 and Demonstration on LHD   | Dr AKIYAMA, Tsuyoshi |       |
| [153] L-H Transitions Triggered by SMBI: Experiment and Theory  | Dr HAHN, Sang-hee    |       |
| [239] MAST Upgrade – Construction Status and Early Research Plans   | Dr MARTIN, Richard   |       |
| [616] Non-Linear MHD Simulations for ITER   | Dr HUIJSMANS, Guido  |       |
| [135] Physics and Engineering Studies of the Advanced Divertor for a Fusion<br>Reactor  | Mr ASAKURA, Nobuyuki |       |
| [406] Experimental Study of the Magnetic Braking Torque by Non-Axisymmetric Magnetic Perturbations in Different Plasma Collisionality Regimes on KSTAR                                | Dr LEE, Hyungho      |       |
| [403] Pedestal Characteristics during the Edge Localized Mode Mitigation by<br>Super-Sonic Molecular Beam Injection on KSTAR  | Dr LEE, Hyunyong     |       |
| [402] Studies of Impurity Seeding and Divertor Power Handling in Fusion Reactor   | Dr HOSHINO, Kazuo    |       |

| [408] Study of Type III ELMs in the KSTAR Tokamak  | Dr SEOL, JaeChun                    |  |
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| [582] Experimental Results and Validation of Thermo-Mechanical Models Used for the PREMUX Test Campaign, as Part of the Roadmap towards an Out-of-Pile Testing of a Full Scale HCPB Breeder Unit Mock-up | Mr HERNANDEZ GONZALEZ,<br>Francisco |  |
| [581] Investigation of Toroidal Rotation Reversal in KSTAR Ohmic Plasmas   | Prof. NA, Yong-Su                   |  |
| [246] Testing of Mock-ups for a Full Tungsten Divertor on Globus-M Tokamak   | Mr NOVOKHATSKY, Alexandr            |  |
| [240] Development of Divertor Simulation Research in the GAMMA 10/PDX<br>Tandem Mirror   | Prof. NAKASHIMA, Yousuke            |  |
| [453] Engineering Aspects and Physical Research Program of the Modernized<br>T-15 Tokamak  | Mr SUSHKOV, Alexey                  |  |
| [176] Globus-M2 Design Peculiarities and Status of the Tokamak Upgrade   | Dr MINAEV, Vladimir                 |  |
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| [180] Final Assessment of Wendelstein 7-X Magnetic Field Perturbations Caused<br>by Construction Asymmetries   | Dr ANDREEVA, Tamara                 |  |
| [10] Results of KTM Lithium Divertor Model Testing on the Tokamak KTM and Future Plans   | Ms TAZHIBAYEVA, Irina               |  |
| [12] High-Temperature Radiolysis of Modified Lithium Orthosilicate Pebbles with<br>Additions of Titania  | ZARINS, Arturs                      |  |
| [325] Low Loop Voltage Start-up Using Trapped Particle Configuration in<br>Versatile Experiment Spherical Torus (VEST)   | Mr AN, YoungHwa                     |  |
| [201] Improvements in the Fast Vertical Control Systems in KSTAR, EAST, NSTX and NSTX-U  | Dr HAHN, Sang-hee                   |  |
| [202] Engineering Feasibility of the Double Decker Divertor  | Dr MCINTOSH, Simon                  |  |
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| [571] On Ohmic Breakdown Physics in a Tokamak  | Prof. NA, Yong-Su                   |  |
| [258] Design and Development of High-Temperature Superconducting Magnet<br>System with Joint-Winding for the Helical Fusion Reactor  | Dr YANAGI, Nagato                   |  |
| [64] Simulation of Neutral Gas Flow in the JET Subdivertor and Comparison with Experimental Results  | Dr VAROUTIS, Stylianos              |  |
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| [262] Development of Functional Materials for CN TBM   | Dr FENG, Yongjin                    |  |
| [283] R&D Status of Reduced Activation Ferritic/Martensitic Steel for CN TBM   | Mr WANG, Pinghuai                   |  |
| [284] Coupling between Intrinsic Rotation and Turbulence-Driven Residual Stress in the TEXTOR Tokamak  | Prof. XU, Yuhong                    |  |
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| [672] Design of Toroidal Coils Testing Bench: Advances in the Mexican Tokamak "T"  | Dr SALVADOR, Max                   |
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| [113] Advanced Structural Analysis of Wendelstein 7-X Magnet System Weight<br>Supports   | Dr BYKOV, Victor                   |
| [422] Change of the Momentum Profiles Driven by the Sawtooth Crashes and its<br>Effect on the LH Transition in KSTAR               | Dr KO, Won-Ha                      |
| [566] Disruption Threshold of Error-Field-Induced Locked Mode under n=1 and n=2 Mixed Non-Axisymmetric Fields                      | Dr KIM, Jayhyun                    |
| [723] Three-Dimensional MHD Analysis of Heliotron Plasma with RMP  | Mr ICHIGUCHI, Katsuji              |
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| [727] Progress of High-Performance Steady-State Plasma and Critical PWI Issue in LHD   | Mr KASAHARA, Hiroshi               |
| [390] In-Vessel Dust Velocity Correlated with the Toroidal Rotation of the Plasma  | Dr HONG, Suk-Ho                    |
| [722] Burning Plasma Relevant Control Development: Advanced Magnetic Divertor Configurations, Divertor Detachment and Burn Control | Mr KOLEMEN, Egemen                 |
| [720] The Initial Programme of Wendelstein 7-X on the Way to a HELIAS Fusion Power Plant   | Mr DINKLAGE, Andreas               |
| [721] Status of Upgrading Project of Tokamak T-15  | Mr AZIZOV, Englen                  |
| [728] Developing Physics Basis for the Radiative Snowflake Divertor at DIII-D  | Mr LEONARD, Anthony W.             |
| [150] Helical Modes Induced by Localized Current Perturbations in Sawtoothing<br>KSTAR Plasmas                                     | Prof. PARK, Hyeon K.               |
| [601] Protection of Superconducting Magnets in Fusion Experiments: the New Technological Solution for JT-60SA                      | Dr GAIO, Elena                     |
| [49] Experimental Base of Innovation S-Channel for Fusion LM Blanket   | Prof. XU, Zengyu                   |
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| [470] New Visible Wide Angle Viewing System for KTM Based on Multielement<br>Image Fiber Bundle                                    | Mr CHEKTYBAYEV, Baurzhan           |