

FESAC TEC Agenda, Rockville MD, Tuesday, 5/30/17

Room: Plaza 1 & 2

<https://www.burningplasma.org/activities/?article=FESAC%20TEC%20Panel%20Public%20Info%20Home%20Page>

REMOTE CONNECTION INFORMATION ON P.3

Registration and badges	8:15
R. Maingi, A. Lumsdaine, S. Barish – Welcome, charge, logistics	8:45
A. White, C. Greenfield – Remarks from subpanel leads	9:05
J. Kelly (Invited – special topic) – Generation IV fission reactor technologies	9:15
L. El-Guebaly (Invited) – Neutronics and Tritium Breeding Capability for Liquid Metal-Based Blanket (DCLL)	10:15
<i>Coffee break</i>	11:00
C. Forsberg – Flibe (6Li2BeF4) Blankets to Integrate Heat Production with Electricity Markets Using Nuclear Brayton Combined Cycles	11:30
<i>Lunch</i>	12:00
C. Romero-Talamas (Invited) – Additive manufacturing of plasma diagnostics	1:30
R. Majeski – Recycling reduction for control of anomalous transport	2:15
T. Biewer – In-situ, real-time measurement of plasma facing component erosion using digital holography	2:45
L. Delgado-Aparicio – Burning-plasma diagnostics: photon and particle detector development needs	3:15
<i>Coffee break</i>	3:45
J. Minervini – Fusion Magnets using High Temperature Superconductors	4:00
Y. Zhai – High Temperature Superconductors for next step fusion magnets	4:30
B. Sorbom – Demountable Superconducting Magnet Coils	5:00
J. Freidberg (D. Whyte) – High Field – The Path Forward for Tokamaks	5:30
<i>Adjourn</i>	6:00

FESAC TEC Agenda, Rockville MD, Wednesday, 5/31/17

Room: Plaza 1 & 2

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REMOTE CONNECTION INFORMATION ON P.3

- X. Wang – REBCO magnet technology to enable next-generation magnetic-confinement fusion machines **9:00**
- J. Schneider (**Invited**) – Machine learning, artificial intelligence and robotic reasoning **9:30**
- A. Flatau – Overview of state-of-the-art smart materials for sensing and actuation **10:15**
- Coffee break* **10:45**
- M. Tillack (L. Holland) – Accelerated Deployment of Silicon Carbide Composites for an Attractive Fusion Energy Source **11:15**
- X. Chen, R. Pinsker (M. Wade) – Next-generation current-drive systems **11:45**
- Lunch* **12:15**
- D. Sutherland – Steady, inductive helicity injection for efficient sustainment of stable toroidal plasmas **1:45**
- N. Eidietis – Technology to Produce Rotation in Reactor Systems **2:15**
- P. Seidl – High power multi-beamlet RF linear ion accelerators for neutral beam injection and plasma heating **2:45**
- E. Schuster – Reactor-like Control Integration by Model-based Real-time Optimization **3:15**
- Coffee break* **3:45**
- N. Eidietis – Transformative Disruption Avoidance/Mitigation solutions **4:00**
- E. Kolemen – Real-time Stability Analysis and Control for Disruption Free Operations **4:30**
- L. Lao – Extreme-Scale Computing with Emphasis on High-Fidelity Physics Leading to Reduced Models for Plasma Simulation and Control Technology **5:00**
- S. Smith (M. Wade) – Spin Polarized Fuel to Advance Magnetic Fusion Performance **5:30**
- Adjourn* **6:00**

FESAC TEC Agenda, Rockville MD, Thursday, 6/1/17

Room: Plaza 1 & 2

<https://www.burningplasma.org/activities/?article=FESAC%20TEC%20Panel%20Public%20Info%20Home%20Page>

REMOTE CONNECTION INFORMATION BELOW

S. Reyes (Invited) – Tritium safety	9:00
L. Reusch (D. DenHartog) – Developing Integrated Data Analysis techniques to optimize diagnostics for burning plasmas (Remote – 1 hour)	9:45
A. Scheinker – Adaptive Feedback Control for Automated Plasma Diagnostics and Control Systems (Remote – 2 hours)	10:15
<i>Coffee break</i>	10:45
R. Boivin – Diagnostic Enhancements for Fusion Development (Remote – 3 hours)	11:15
B. Williams – Robust Cellular Solid Breeder Offering Potential for New Blanket Designs with High Tritium Breeding Ratio (Remote – 3 hours)	11:45
<i>Lunch</i>	12:15
Panel Executive Session (closed door)	1:45
<i>Adjourn</i>	5:00

Remote Connection Information

Join from PC, Mac, Linux, iOS or Android: <https://zoom.us/j/5356199734>

Or iPhone one-tap (US Toll): +14086380968,5356199734# or +16465588656,5356199734#

Or Telephone:

Dial: +1 408 638 0968 (US Toll) or +1 646 558 8656 (US Toll)

Meeting ID: 535 619 9734

International numbers available: <https://zoom.us/join?j=5356199734&pwd=PKzuM-ZI8yZpCUu0b0B46hRtXdL77UL7>

Or an H.323/SIP room system:

H.323:

162.255.37.11 (US West)

162.255.36.11 (US East)

Meeting ID: 535 619 9734

SIP: 5356199734@zoomcrc.com

Registered Attendees

Panelists

Rajesh Maingi (PPPL) – Chair
Arnold Lumsdaine (ORNL) – Vice-Chair
S. Knowlton (Auburn – emeritus) – FESAC ex-officio member
Sam Barish (FES) – FES liaison
Anne White (MIT) – sub-panel lead
Luis Chacon (LANL)
David Humphreys (GA)
Val Izzo (UCSD)
Chuck Greenfield (GA) – sub-panel lead
Jerry Hughes (MIT)
Harry McLean (LLNL)
Jon Menard (PPPL)
Brad Merrill (INL)

Onsite Speakers

John Kelly, DoE
Laila El-Guebaly, U. Wisconsin-Madison retired
Charles Forsberg, MIT
Carlos Romero-Talamas, U. Maryland
Ted Biewer, ORNL
Luis Delgado-Aparicio, PPPL
Richard Majeski, PPPL
Joe Minervini, MIT
Yuhu Zhai, PPPL
Brandon Sorbom, MIT
Dennis Whyte, MIT
Jeff Schneider, Carnegie Mellon U.
Xiarong Wang, LBL
Leo Holland, GA
Mickey Wade, GA
Derek Sutherland, U. Washington
Nick Eidietis, GA
Peter Seidl, LBNL
Alison Flatau, U. Maryland
Eugenio Schuster, Lehigh U.
Egemen Kolemen, PPPL
Lang Lao, GA
Susana Reyes, LBNL