

**1<sup>st</sup> US Burning Plasma Organization Workshop**  
**7 -9 December 2005 ORNL**  
**Energetic Particles Break-out Session**

**Agenda**

*Wednesday, 7 December 2005*

18:00 – 20:00 Working Reception in Room 214: Energetic Particle issues discussion

*Thursday, 8 December 2005*

8:30 – 8:50 N. Gorelenkov: Alfvén Eigenmode stability with beams and  $\alpha$ -particle profile quasilinear relaxation in BP

8:55 – 9:15 D. Brennan: ICRF interactions with fast ions and effects on MHD stability

9:20 – 9:40 E. Fredrickson: Collective fast ion transport in a "sea of MHD"

9:45 – 10:05 B. Heidbrink: The importance of internal fluctuation & fast-ion profile measurements

10:10 – 10:25 K-L. Wong: My view on the new direction for energetic particle physics research

10:30 – 10:50 *Coffee break*

10:50 – 11:05 L. Berry: Self-consistent Calculation the Quasilinear Interaction Between ICF waves and Energetic Ions

11:10 – 11:30 D. Brower: Core Fluctuation Measurements (of Energetic Particle Driven Modes) in a Burning Plasma

11:35 – 11:50 T. Peebles: Microwave-based measurements of Fast Particle Driven Alfvén modes in Burning Plasmas

11:55 – 13:10 *Lunch*

13:10 – 13:30 H. Berk: A view of energetic particle physics issues related to ITER

13:35 – 13:55 L. Sugiyama: Alpha Particle Effects on MHD Modes in ITER: Hybrid Simulations

14:00 – 14:20 D. Spong: Alpha particle physics modeling issues for burning plasmas

14:25 – 14:45 *Coffee break*

14:50 – 15:10 M. Porkolab: Detection of Alfvén Waves with Phase Contrast Imaging Diagnostics in Alcator C-Mod and Potential Applicability to ITER

15:15 – 15:30 G. Wurden: Triton burnup measurements before DT operation

15:35 – 15:55 D. Hutchinson: Infrared Laser Scattering Diagnostic for Confined  $\alpha$ -particles

16:00 – 17:30 Discussion of the six questions for the USBPO