Agenda of the CUP Summary Seminar at Okinawa

=========9 March (Wed.), 2011===============

15:00-15:10: **Opening**

15:10-15:40: Short summary of history and results of collaborations in the CUP from 2001 to 2005 [K.J. Wang, J.Y. Zhao, T. Watari, C. Namba]

Session I: magnetically confined core plasmas (11A & 11B and related topics) [Chair: K. Toi]

15:40-16:20: "11A: Development of Advanced Plasma Heating for High Performance Plasma

Confinement-Summary and Topical Talk" (40 min) [R. Kumazawa (NIFS), X.

Gao (ASIPP), L.W. Yan(SWIP)] (presented by R. Kumazawa)

16:20-17:00: "Summary of Research Activities on 11B (Plasma Experiment and Diagnostics in MCF) During Past 5 Years and Future Prospect" (40 min) [S. Morita(NIFS), X. Gao(ASIPP), L.W. Yan(SWIP)] (presented by S. Morita)

17:00-17:25: "Recent results on EAST" (25min) [X. Gao (ASIPP)]

17:25-17:50: "The JT-60SA project and the plasma regimes" (25min) [S. Ide (JAEA)]

Reception 18:45~

Session II: Plasma wall interaction (12A) [Chair: K.J. Wang]

9:10~9:45: "Overall activities on plasma wall interactions (12A) since 2006 and collaboration researches conducted at Hokkaido University" (35 min) [T. Hino (Hokkaido Univ.), N. Ahikawa (NIFS) and N. Noda (NIFS)] (presented by T. Hino)

9:45-10:10: "Program of plasma facing material and components for the steady state operation of EAST device" (25min) [J.L. Chen (ASIPP)]

10:10-10:35: "CUP collaborations on plasma wall interactions (12A)" (25min) [N. Ashikawa (NIFS)]

coffee break(10:35-10:55)

Session III: Atomic and Molecular Process in Plasmas (13A) [Chair: S. Morita]

10:55-11:30: "Summary in 2006-2010 of 13 A: Research activities, exchanges and seminars of Atomic and Molecular Process in Plasmas" (35 min) [D. Kato(NIFS),

N. Nakamura (UEC) and T. Kato(NIFS)] (presented by D. Kato)

11:30-11:55: "Atomic and Molecular process in plasmas" (25minx) [J.G. Wang (IAPCM, CAS),

B.G. Xiao (ASIPP)](presented by B.G. Xiao)

Lunch (11:55-13:30)

Session III: Atomic and Molecular Process in Plasmas (13A)(continued) [Chair: S. Morita]

13:30-13:55: "Atomic Processes of Highly Charged Heavy Ions Relevant to Hot Plasmas" (25min) [N. Nakamura(UEC)]

Session IV: Plasma industrial applications (14C) [Chair: B. J. Xiao]

13:55~14:30: "Progress and Outlook of Plasma Industrial Application" (14C)" (35 min)

[R. Hatakeyama (Tohoku Univ.) & M. Sato (NIFS)]

(presented by R. Hatakeyama)

14:30-14:55: "PEMFCs Preparation by Plasma technique" (25min) [Y.D. Meng (ASIPP)]

coffee break(14:55-15:15)

Session V: Laser produced dense plasmas (15A, 15B) [Chair: Z. Gao]

- 15:15~15:45: "Topical Summary of Japan-China CUP Program on Laser Plasma Theory for the Last Ten Years". (30 min) [K. Tanaka (Osaka Univ.) & H. Takabe (Osaka Univ.)] (presented by K. Takabe)
- 15:45-16:10: "Some Progress on High Energy Density Physics under the China-Japan CUP Collaboration" (25min) [Z.M. Sheng (Shanghai Jiatong Univ.)]
- 16:10-16:35: "Laboratory Astorophysics Joint Research with China Group Lead by President Jie Zhang" (25min) ‡H. Takabe (Osaka Univ.)]

Session VI: Fusion reactor technologies (20A, 20D, 20E, 20F) [Chair N. Yanagi]

- 16:35-17:10: "Summary of CUP Collaborations and New Directions for Fusion Reactor Technologies" (35 min) [T. Muroga (NIFS)]
- 17:10-17:35: "Summarize on the researcher exchanges from FY2006-2011 from Chinese side

 (Basic Research of Nuclear Fusion Reactor Engineering) 20-A,D,E,F"

 (25min) [Y. WU (ASIPP), Y. Song (ASIPP)] (presented by Y. Wu)
- 17:35-18:00: "Hydrogen Fuel Society and Hybrid Energy Transfer Line of Hydrogen and Electricity" (25min) [S. Yamada (NIFS)]

18:45 Seminar Banquet

===============11 March (Fri.), 2011====================

Session VI: Fusion reactor technologies (20A, 20D, 20E, 20F) (continued) [Chair L.Q. Hu]

9:10-9:35: "In-situ Observation of Radiation Damage in Reduced Activation Ferritic Steels by means of HVEM-ion Accelerator Facility" (25min) [S. Ohnuki (Hokkaido Univ.)]

9:35-10:00: "Study of tritium behavior in solid breeder materials" (25min) [Y. Oya (Shizuoka Univ.) and K.M. Feng (SWIP)] (presented by Y. Oya)

10:00-10:25: "Analysis on Tritium Management in FLiBe Blanket for Force-Free Helical Reactor FFHR2" [Y. Song (ASIPP), A. Sagara (NIFS)] (presented by A. Sagara)

coffee break(10:25-10:45)

Session VII: Plasma theories (30A, 30B, 30C, 30D) [Chair H. Takabe]

10:45~11:10: "Summary of 30A- Study on Theoretical Analysis of MHD and Microinstabilities in Plasmas —" and "Summary of 30B- Study on transport Theory, Code Development of Numerical Analysis and Confinement Improved Mode in Torus Plasmas —" (25 min) [Y. Kishimoto (Kyoto Univ.), D. Li (USTC), Z. Gao (Tsinghua Univ.), Y. Tomita(NIFS)] (presented by Y. Kishimoto)

11:10-11:35: "Summary of Physics of self-organization in Complex plasmas" (30C) and "Modeling of edge and divertor plasma and control of impurities and recycling particles (30D) since 2006" (25 min) [R. Horiuchi (NIFS) & Y. Tomita(NIFS)] (presented by Y. Tomita)

11:35-12:00: "Understanding for multi-scale interaction of fusion plasmas and future collaboration" (25min) [Y. Kishimoto (Kyoto Univ.)]

Lunch(12:00-13:30)

Session VII: Plasma theories (30A, 30B, 30C, 30D)(continued) [Chair T. Watari]

13:30-13:55: "Some points on rf physics in magnetic fusion plasmas" (25min)

[Z. GAO (Tsinghua University)]

13:55-14:20: "Future Collaboration Researches on Peripheral Plasmas" (25min)
[Y. Tomita (NIFS)]

coffee break(14:20-14:40)

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Session VIII: Topical session (11A-B, 14A, 20A-F) [Chair X. Gao]

14:40-15:05: "Invitation to collaboration on the development of HTS magnet technology for fusion reactors" (25min) [N. Yanagi (NIFS)]

15:05-15:30: "Recent experiments and future collaborations on QUEST" (25min)
[K. Hanada (Kyusyu Univ.)]

15:30-15:55: "A New Flame for Humanity - An Innovation to the Heavy Industries using Green Electric Energy by Fusion Power-"(25min) [M. Sato (NIFS)]

15:55~16:20: Session IX: Seminar summary [K.J. Wang, K. Toi]

16:20-16:30 **Closing**
