



Contribution ID: 134

Type: Poster

## EX/P3-07: Study of Fueling Control for Confinement Experiments in Heliotron J

Wednesday, 10 October 2012 08:30 (4 hours)

This paper discusses the effects of fueling control on plasma performance in Heliotron J, a helical-axis heliotron device with an  $L/M = 1/4$  helical coil ( $R_0 = 1.2$  m,  $\langle a_p \rangle = 0.12 - 0.17$  m,  $\langle B_0 \rangle < 1.5$  T). Here,  $L$  and  $M$  are the polenumbers of the helical coils. The averaged density is about 30–40% higher in GP compared to SMI, the expected difference in the neutral density outside the plasma. The transition in Heliotron J. In addition, recent density fluctuation measurement at different radial positions with a beam-emission spectroscopy (BES) system suggests SMI affects the fluctuation inside the last-closed flux surface. Here, the observed energy ions. During about 10 ms after SMI, the fluctuation is not observed in BES data and the Mirnov-coils signal is decreased, s

### Country or International Organization of Primary Author

JAPAN

**Primary author:** Mr MIZUUCHI, Tohru (Japan)

**Co-authors:** Prof. SANO, Fumimichi (Kyoto University); Prof. OKADA, Hiroyuki (Kyoto University); Mr LEE, Hyunyong (Kyoto University); Prof. NAGASAKI, Kazunobu (Kyoto University); Dr MUKAI, Kiyofumi (Kyoto University); Prof. HANATANI, Kiyoshi (Kyoto University); Mr ZANG, Linge (Kyoto University); Dr TAKEUCHI, Masaki (JAEA); Prof. NISHINO, Nobuhiro (Hiroshima University); Dr YAMAMOTO, Satoshi (Kyoto University); Dr KONOSHIMA, Shigeru (Kyoto University); Prof. KADO, Shinichiro (University of Tokyo); Dr KOBAYASHI, Shinji (Kyoto University); Dr OSHIMA, Shinsuke (Kyoto University); Prof. MINAMI, Takashi (Kyoto University); Prof. NAKASHIMA, Yosuke (University of Tsukuba); Prof. NAKAMURA, Yuji (Kyoto University)

**Presenter:** Mr MIZUUCHI, Tohru (Japan)

**Session Classification:** Poster: P3

**Track Classification:** EXC - Magnetic Confinement Experiments: Confinement