## Lie Groups and Representation Theory Seminar at the University of Tokyo

## リー群論・表現論セミナー

Date February 5 (Tue), 2013, 17:30–19:00

PLACE Room 126, Graduate School of Mathematical Sciences

Speaker Nizar Demni (Université de Rennes 1)

TITLE Dunkl processes assciated with dihedral systems, II

ABSTRACT I'll focus on dihedral systems and its semi group density. I'll show how one can write down this density using probabilistic techniques and give some interpretation using spherical harmonics. I'll also present some results attempting to get a close formula for the density: the main difficulty comes then from the inversion (in composition sense) of Tchebycheff polynomials of the first kind in some neighborhood. Finally, I'll display expressions through known special functions for even dihedral groups, and the unexplained connection between the obtained

formulas and those of Ben Said-Kobayashi-Orsted.