

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

リ－群論・表現論セミナー

- DATE January 22 (Tue), 2008, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Toshio Oshima** (大島利雄) (University of Tokyo)
- TITLE Connection problems for Fuchsian differential equations free from accessory parameters
- ABSTRACT The classification of Fuchsian equations without accessory parameters was formulated as Deligne–Simpson problem, which was solved by Katz and they are studied by Haraoka and Yokoyama. If the number of singular points of such equations is three, they have no geometric moduli. We give a unified connection formula for such differential equations as a conjecture and show that it is true for the equations whose local monodromy at a singular point has distinct eigenvalues. Other Fuchsian differential equations with accessory parameters and hypergeometric functions with multi-variables are also discussed.