

Geometry in Nara

- Around Subriemannian Geometries -

August 19 (Tuesday) - 21 (Thursday), 2014
Nara Women's University, Lecture Room G202

Program

August 19 (Tuesday)

- 10:30–11:20:** **Yuri Sachkov**
Left-invariant sub-Riemannian geometry on Engel group,
- 11:30–12:130:** **Kenro Furutani**
Towards a construction of the heat kernel for a higher step Grushin operator
- 14:00–14:50:** **Yumiko Kitagawa**
The duality of geodesics on sub-Riemannian Cartan structures
- 15:00–15:50:** **Tohru Morimoto**
How to define the curvatures of a subriemannian manifold

August 20 (Wednesday)

- 9:30–10:20:** **Yoshinori Machida**
Geometry of D_4 conformal triality
- 10:35–11:25:** **Chisato Iwasaki**
Construction of the fundamental solution for degenerate operators of Grushin type
- 11:40–12:30:** **Masato Ishikawa**
Control of nonholonomic robot systems
- 14:00–14:50:** **Yuri Sachkov**
Free nilpotent sub-Riemannian geometry

August 21 (Thursday)

- 9:30–10:20:** **Atsuhide Mori**
Foliations and contact structures on S^3 and S^5
- 10:35–11:25:** **Daisuke Tarama**
Stability Analysis for the Free Rigid Body Dynamics on $U(n)$
- 11:40–12:30:** **Toshihiro Iwai**
Control systems – the falling cat and the inverted pendulum –

Organizers:
Junichi Matsuzawa, Tohru Morimoto