# Kansai Integrable System Seminar Special Lecture Series on Elliptic Hypergeometric Functions

Jan/23 (Tue) -- 26 (Fri) and Mar/12 (Mon) -- 16 (Fri) Graduate School of Informatics, Kyoto University

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### TITLE:

# Introduction to the Theory of Elliptic Hypergeometric Functions

#### Contents:

- 1. Univariate plain and q-hypergeometric series.
- 2. Elliptic functions and theta functions; Riemann identity.
- 3. General univariate elliptic hypergeometric series.
- 4. Plain and q-hypergeometric gamma functions and integrals.
- 5. Elliptic gamma functions.
- 6. Elliptic analogue of the Meijer function.
- 7. Modular, well poised and very-well poised elliptic hypergeometric functions.
- 8. The Frenkel-Turaev summation formula.
- 9. The univariate elliptic beta integral.
- 10. Elliptic extension of the Gauss hypergeometric function, its symmetries and the elliptic hypergeometric equation.
- 11. Univariate elliptic biorthogonal functions.
- 12. The elliptic Selberg integral and other elliptic beta integrals on root systems.

Time: Lecture: 14:45--15:45 Break: 15:45--16:00 Lecture: 16:00--17:00

## **Room Number:**

Jan/23,26: Lecture Room 406, Faculty of Engineering Integrated Research Building Jan/24,25: Lecture Room 102, Faculty of Engineering Integrated Research Building Mar/12: Lecture Room 102, Faculty of Engineering Integrated Research Building Mar/13-16: Lecture Room 406, Faculty of Engineering Integrated Research Building

## Kansai Integrable System Seminar Web Page:

http://www-is.amp.i.kyoto-u.ac.jp/kiss/index.html

## Access and Map:

[English] Access to Yoshida Campus:

http://www.kyoto-u.ac.jp/english/eaccess/e07\_acce/getting\_1.htm Map: http://www.kyoto-u.ac.jp/english/etop2/images/main2006.gif [Japanese] 京都大学 工学部総合校舎

http://www.kyoto-u.ac.jp/access/kmap/map6r\_y.htm

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<sup>\*</sup>These lectures are open to all interested researchers and graduate students.