

# The Fourteenth

# Takagi Lectures



Teiji Takagi (1875-1960)

Date : November 15 (Sat) - 16 (Sun), 2014

Place : Graduate School of Mathematical Sciences, The University of Tokyo



**A. Guionnet**  
(Massachusetts Institute of Technology)

Two Lectures on  
Random Matrices and Free  
Analysis



**C. Manolescu**  
(University of California,  
Los Angeles)

Two Lectures on  
Floer Theory and Its  
Topological Applications



**P. Scholze**  
(Universität Bonn)

Two Lectures on  
On Torsion in the Cohomology  
of Locally Symmetric Varieties

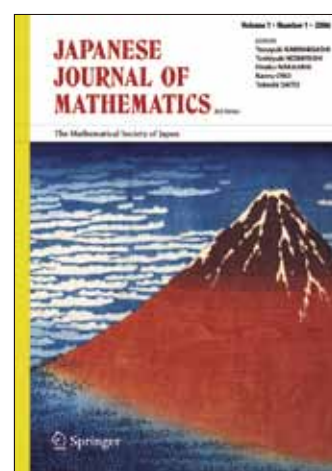


**A. Venkatesh**  
(Stanford University)

Two Lectures on  
Cohomology of Arithmetic  
Groups and Periods of  
Automorphic Forms

#### ◆List of Takagi Lecturers

- 2006 **S. Bloch, P.-L. Lions, S. Smale, C. Voisin**
- 2007 **K.-H. Neeb, D.-V. Voiculescu, M. Yor, J. Makino, P. Malliavin**
- 2008 **H. Ooguri, O. Viro, J.-P. Bourguignon, É. Ghys, M. Kontsevich, N.A. Nekrasov**
- 2009 **M. Khovanov, D. McDuff, M. Harris, M. Hopkins, U. Jannsen, C. Khare, J. McKernan**
- 2010 **A. Connes, S. Gukov**
- 2011 **S. Brendle, C. Kenig**
- 2012 **Y. Benoist, A. Naor, P.F. Baum, A. Lubotzky, R. Seiringer**
- 2013 **L. Lafforgue, S. Popa, H. Oh, G. Tian**



 **JAPANESE JOURNAL OF MATHEMATICS**  
SINCE 1924

Articles based on the Takagi Lectures are to appear in the *Japanese Journal of Mathematics* (the official journal of Math. Soc. Japan, published by Springer).

#### Organizing Committee:

**Y. Kawahigashi** / **T. Kobayashi** / **H. Nakajima** / **K. Ono** / **T. Saito**  
(Univ. of Tokyo) (Univ. of Tokyo / Kavli IPMU) (RIMS, Kyoto) (RIMS, Kyoto) (Univ. of Tokyo)



The Mathematical Society of Japan



Graduate School of  
Mathematical Sciences,  
The University of Tokyo

Supported by



Japanese Journal of Mathematics

Takagi Lectures Web site:

<http://www.ms.u-tokyo.ac.jp/~toshi/takagi/>

The Fourteenth Takagi Lectures are partially supported by the ICM 90 Kyoto Fund.