

# Mathematics of Quasi-Periodic Order.

As a satellite workshop of "The 11th International Conference on Quasicrystal (ICQ11)", RIMS cooperative research meeting under this title will take place. This meeting is supported jointly by ICQ11 and RIMS.

Date: Date: 21 June - 23 June, 2010  
Place: RIMS, 1F, 111, Kyoto University

## Organizers:

Shigeki Akiyama (Chair) < Niigata Univ., akiyama@math.sc.niigata-u.ac.jp>  
Kazushi Komatsu <Kochi Univ., komatsu@kochi-u.ac.jp>

## (Update 14 June 2010)

### Monday 21 June

- 14:00 - 14:30 Nobuhisa Fujita (Tohoku Univ.)  
Point substitution processes for generating icosahedral tilings.  
14:40 - 15:40 Franz Gähler (Univ. Bielefeld)  
Topological invariants of aperiodic tilings.  
15:50 - 16:30 Shlomo I. Ben-Abraham (Ben-Gurion Univ.) and Alexander Quandt (Ernst-Moritz-Arndt Univ.)  
Aperiodic structures, order and disorder.  
16:40 - 17:10 Tohru Ogawa (ISTA)  
TBA

### Tuesday 22 June

- 9:30 - 10:10 Edmund Harriss (Univ. Leicester)  
Action at a distance? The mysteries of aperiodic tilings.  
10:20 - 11:20 Michael Baake (Univ. Bielefeld) and Uwe Grimm (Open Univ.)  
Diffraction theory of deterministic and stochastic structures (part I).  
11:30 - 12:30 Michael Baake (Univ. Bielefeld) and Uwe Grimm (Open Univ.)  
Diffraction theory of deterministic and stochastic structures (part II).  
14:30 - 15:00 Tomonari Dotera (Kinki Univ.) and Junichi Matsuzawa (Nara Women's Univ.)  
Hyperbolic Tiling on the Gyroid Surface in a Polymeric Alloy.  
15:10 - 15:40 Fumihiko Nakano (Gakushuin Univ.) and Taizo Sadahiro (Kumamoto Pref. Univ.)  
On a beta expansion with negative bases.  
15:50 - 16:20 Hajime Kaneko (Kyoto Univ.)  
On the complexity of the binary expansions of algebraic numbers.  
16:30 - 17:00 Akio Hizume (Figurative artist, Ryukoku Univ.) and Yoshikazu Yamagishi (Ryukoku Univ.)  
Stripes on Penrose Tilings.  
17:10 - 17:40 Hiroko Hayashi (Kochi Univ.) and Kazushi Komatsu (Kochi Univ.)  
Some observations on a substitution rule with singular vertex atlases.

### Wednesday 23 June

- 9:40 - 10:20 Jeong-Yup Lee (KIAS)  
When do substitution Delone sets have the Meyer property ?  
10:30 - 11:10 Peter Zeiner (Univ. Bielefeld)  
Coincidences, Colourings and Similarities.  
11:20 - 12:20 Shunji Ito (Kanazawa Univ.) and Maki Furukado (Yokohama National Univ.)  
The substitutions related to the Rauzy induction of 4-interval exchange transformations and tilings II.