### RIMS conference

# RECENT DEVELOPMENTS OF OPERATOR THEORY BY BANACH SPACE TECHNIQUE AND RELATED TOPICS

Organizer: Masaru Tominaga (Osaka Kyoiku University)

Date: October 23-25, 2017

Place: Room 111, Research Institute for Mathematical Science Kyoto University, Kyoto 606-8502, JAPAN http://www.kurims.kyoto-u.ac.jp/en/index.html

# October 23 (Mon)

- 13:00-13:30 Marek Ptak (University of Agriculture in Krakow) Conjugation in model spaces and asymmetric truncated Toeplitz operators
- 13:30-14:00 Kamila Klis-Garlicka (University of Agriculture in Krakow) Truncated Toeplitz operators can be characterized by conjugations
- 14:15-14:45 Muneo Cho (Kanagawa University), Eungil Ko (Ewha Womans University), Ji Eun Lee (Sejong University), Haruna Motoyoshi (Kanagawa University)

On a conjugation and a linear operator II

- 14:45-15:15 Piotr Budzynski (University of Agriculture in Krakow) Aluthge transforms of weighted composition operators in L<sup>2</sup>-spaces
- 15:30-16:00 Jaehui Park (Seoul National University) Toeplitz and Hankel operators induced by a measure
- 16:10-16:40 Ryotaro Tanaka (Kyushu University) Complementarity of subspaces of  $\ell_{\infty}$  revisited

## October 24 (Tue)

- 9:45-10:30 Takeaki Yamazaki (Toyo University)
  The Karcher equation, relative operator entropy and the Ando-Hiai inequality
- 10:40-11:10 Masatoshi Ito (Maebashi Institute of Technology) , Takayuki Furuta (Hirosaki University) , Masahiro Yanagida (Tokyo University of Science), Takeaki Yamasaki (Toyo University)

Bounds and operator monotonicity of a generalized Petz-Hasegawa function

11:20-11:50 Hiroshi Isa (Maebashi Institute of Technology), Masatoshi Ito (Maebashi Institute of Technology), Eizaburo Kamei, Hiroaki Tohyama (Maebashi Institute of Technology), Masayuki Watanabe (Maebashi Institute of Technology)

On n-th generalized operator valued divergences

### Lunch break

- 13:15-14:00 Kichi-Suke Saito (Niigata University) , Naoto Komuro (Hokkaido University of Education) , Ryotaro Tanaka (Kyushu University) On the structure of Banach spaces with James constant  $\sqrt{2}$
- 14:10-14:40 Imam Nugraha Albania (UPI) Operator Norm Inequality and Positive Definiteness of Some Functions
- 14:50-15:20 Masayuki Fujimoto (Osaka Kyuoiku University) Matrix Wielandt inequality via the matrix geometric mean
- 15:30-16:00 Jun Ichi Fujii (Osaka Kyoiku University), Yuki Seo (Osaka Kyoiku University)
  Tsallis relative operator entropy of negative order
- 16:10-16:40 Masatoshi Fujii (Osaka Kyoiku University) Riccati equation for positive semidefinite matrices

## October 25(Wed)

- 9:45-10:30 Sin-Ei Takahasi (Yamagata University) Inequalities and I
- 11:20-11:50 Masatoshi Enomoto, Yasuo Watatani (Kyushu University) Configuration problem of two subspaces