# East Asian Conference on Gauge theory and Related topics

**Date**: September 11–15, 2018

Place: Room 110, Science Building No.3 (Department of Mathematics),

North campus, Kyoto university

# $Program^1$

## September 11 (Tue)

10:00–10:50 Shinichiroh Matsuo (Nagoya University)

Asymptotic diameter growth of instanton moduli spaces

11:10–12:00 Kyungbae Park (Korea Institute for Advanced Study)

Irreducible 3-manifolds that cannot be obtained by 0-surgery on a knot

13:30–14:20 Ki-Heon Yun (Sungshin Women University)

Various aspects of knot surgery 4-manifold

14:30–15:20 Hakho Choi (Korea Institute for Advanced Study)

A Lefschetz fibration structure on minimal symplectic fillings of a quotient surface singularity

15:50–16:40 Hokuto Konno (University of Tokyo)

Gauge theory for families of 4-manifolds

#### September 12 (Wed)

10:00–10:50 Bo Dai (Peking University)

Minimal genus for 3- and 4-manifolds

11:10–12:00 Ko Ohashi (University of Tokyo)

Pin(2)-equivariant maps between vector bundles over tori and KO-degree

13:30–14:20 Dong Heon Choe (Seoul National University)

On intersection forms of definite 4-manifolds bounded by a rational homology 3-sphere

14:30–15:20 Minkyu Kim (University of Tokyo)

A K-theoretical Dijkgraaf-Witten theory

15:50–16:40 Youlin Li (Shanghai Jiao Tong University)

Hyperbolic 3-manifolds admitting no fillable contact structures

#### September 13 (Thu)

10:00–10:50 Jongil Park (Seoul National University)

A rational blowdown surgery on 4-manifolds

11:10–12:00 Yuanyuan Bao (University of Tokyo)

A topological interpretation of Viro's gl(1|1)-Alexander polynomial of a graph

 $<sup>^{1}2018/9/15</sup>$ 

## September 14 (Fri)<sup>2</sup>

10:00–10:50 Fuquan Fang (Beijin Capital Normal University)

Dual submanifolds in rational homology spheres

11:10–12:00 Masaki Taniguchi (University of Tokyo)

Instantons for 4-manifolds with periodic end and an obstruction to embeddings of 3-manifolds

13:30–14:20 Zhongtao Wu (The Chinese University of Hong Kong)

On Contact Surgery along Legendrian Links

14:30–15:20 Yohsuke Imagi (Nagoya University)

Singularities of Special Lagrangians

15:50–16:40 Tirasan Khandhawit (OIST)

Gluing theorems for Bauer-Furuta invariants

## September 15 (Sat)

10:00–10:50 Yi-Jen Lee (The Chinese University of Hong Kong)

Holomorphic curves and Seiberg-Witten cobordism maps

11:10–12:00 Kouki Sato (University of Tokyo)

A partial order on  $\nu^+$  equivalence classes

13:30–14:20 Yoshihiro Fukumoto (Ritsumeikan University)

Instantons and uniformization of orbifolds

14:30–15:20 Chung-I Ho (National Kaohsiung Normal University)

Non-orientable Lagrangian surfaces in symplectic 4-manifolds and symplectic packing problem

#### Scientific Committee

Mikio Furuta (University of Tokyo), Tsuyoshi Kato (Kyoto University),

Tian-Jun Li (University of Minnesota), Jongil Park (Seoul National University)

## Organizing Committee

Tsuyoshi Kato (Kyoto University), Nobuhiro Nakamura (Osaka Medical College), Hirofumi Sasahira (Kyushu University)

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<sup>&</sup>lt;sup>2</sup>The talk of Hang Wang scheduled in Sep 14 is canceled.