# Workshop on Geometric Function Theory and Special Functions III

**Date** February 5 (Wed) — 6 (Thu), 2020

**Venue** Middle Lecture Hall on the 2nd floor, Graduate School of Information Sciences, Tohoku University

Host The Research Center for Pure and Applied Mathematics (RCPAM)

**Funding** Graduate School of Information Sciences (GSIS) and JSPS KAKENHI Grant Number JP17H02847 represented by Toshiyuki Sugawa (Tohoku Univ.)

## Program

## February 5 (Wednesday)

- 09:40 10:30 Toshiyuki Sugawa (Tohoku University, Japan) New quantities characterizing uniformly perfect sets
- 10:40 11:10 Yutong Liu (Beihang University, China / Tohoku University, Japan) Subspaces of the universal Teichmüller space and function spaces
- 11:20 12:10 Hiroshi Yanagihara (Yamaguchi University, Japan)
  Loewner Theory on Covering Maps
- 13:40 14:10 Tanran Zhang (Soochow University, China)
  Möbius invariant metrics and uniform perfectness
- 14:20 14:50 Alam Md Shafiul (Tohoku University, Japan)
  Hypergeometric functions as automorphic forms on Shimura curves
- 15:00 15:30 Ming Li (Changsha University of Science and Technology, China)
  The parametric coefficients of the Carathéodory function and its applications
- 15:40 16:30 Hiroshige Shiga (Kyoto Sangyo University, Japan)
  On moduli spaces of generalized Cantor sets
- 16:40 17:30 Hiroki Fujino (Nagoya University, Japan) Reflection principles for minimal or maximal surfaces
- 18:30 20:30 Dinner at a restaurant in the downtown

## February 6 (Thursday)

- 10:00-10:30 Gangqiang Chen (Tohoku University, Japan) Variability regions for the second derivative of bounded analytic functions
- 10:40 11:20 Young Jae Sim (Kyungsung University, Korea) On coefficient problems for functions in subclasses of S
- ${f 11:30-12:00}$  Lijie Sun (Shandong University at WeiHai, China) Notes on the quasiconformal mappings on the Heisenberg group
- 13:30 14:20 Matti Vuorinen (University of Turku, Finland / Guandong Technion, China) Conformal invariants computation, theory, and experiments
- 14:30 15:00 Masayo Fujimura (National Defense Academy, Japan)
  Geometry of finite Blaschke products: duality and its applications
- 15:10-16:00 Barkat Ali Bhayo (Sukkur IBA University, Pakistan)
  On new means generated by generalized trigonometric functions
- 16:10-16:40 Jingjing Su (Beihang University, China / Tohoku University, Japan) Certain nonlinear waves modulated by long waves in the AB system
- 16:50 17:20 Tingting Jia (Beihang University, China / Tohoku University, Japan)
  On the quintic time-dependent-coefficient derivative nonlinear Schrödinger equation in hydrodynamics

#### Organizer

Toshiyuki Sugawa (Tohoku Univ.)

#### Secretary

Rintaro Ohno (Tohoku Univ.)