30th International Conference on Finite or Infinite Dimensional Complex Analysis and Applications (ICFIDCAA 2024)

Period: August 19 (Mon) – August 23 (Fri), 2024

Venue: Large Lecture Hall (on the 2nd floor of the main building), Graduate School of

Information Sciences, Aobayama Campus, Tohoku University, Sendai, JAPAN

Hosts: The Research Center for Pure and Applied Mathematics (RCPAM) and Graduate

School of Information Sciences (GSIS), Tohoku University

Program as of August 20, 2024

August 19 (Monday)

08:30-09:30 Registration

09:30–10:00 Opening addresses

(Chair: Toshiyuki Sugawa)

10:00–10:50 Jie Xiao (Memorial University, Canada)

Schatten p-class for holomorphic composition operator on smoothly bounded strongly pseudoconvex domain

11:10–11:40 Hiroaki Aikawa (Chubu University, Japan)

Intrinsic Ultracontractivity for planar domains with wide access property

11:50–12:20 Gou Nakamura (Aichi Institute of Technology, Japan)

Automorphism groups of closed Klein surfaces with extremal disks

Lunch Break

(Chair: Jie Xiao)

14:00–14:50 Boo Rim Choe (Korea University, South Korea)

Progress on the Shapiro-Sundberg problems

15:00–15:30 Katsuhiko Matsuzaki (Waseda University, Japan)

A fiber space over the Teichmüller space of circle diffeomorphisms in the Zygmund class

15:50–17:25 Parallel Session I (Large lecture hall and Middle lecture hall)

18:00–20:00 Reception at Large Lecture Hall

August 20 (Tuesday)

(Chair: Vesna Todorcevic)

09:00–09:50 Anatoly Golberg (Holon Institute of Technology, Israel)

Mappings of finite directional dilatations and boundary correspondence in \mathbb{R}^n

10:00–10:50 Tuen Wai Ng (The University of Hong Kong, Hong Kong SAR) Brody curves on Fermat surface of degree six

(Chair: Hidetaka Hamada)

11:10–11:40 Paweł Zaprawa (Lublin University of Technology, Poland)
On the coefficients of inverse of convex functions

11:50–12:20 Rakesh Kumar Parmar (Pondicherry University, India)

Extended generalized complete elliptic integrals and related bounding inequalities

Lunch Break

(Chair: Hiroshige Shiga)

14:00–14:50 Jun Hu (City University of New York, USA)

Characterizations of circle homeomorphisms of different regularities in the universal Teichmüller space

15:00–15:30 Shiyu Zhang (University of Science and Technology of China, China) A Bochner-type formula for nonnegative holomorphic sectional curvature

15:50–17:50 Parallel Session II (Large lecture hall and Middle lecture hall)

August 21 (Wednesday)

(Chair: Tatsuhiro Honda)

09:00–09:50 Hidetaka Hamada (Kyushu Sangyo University, Japan) Fekete-Szegö inequalities in higher dimensions

10:00–10:50 Guang-Yuan Zhang (Tsinghua University, China)

The precise form of Ahlfors' Second Fundamental Theorem of covering surfaces

(Chair: Shin-ichi Matsumura)

11:10–11:40 Tsz On Mario Chan (Pusan National University, South Korea)

Analytic adjoint ideal sheaves and the harmonic residue on Kähler manifolds

11:50–12:20 Jian-Feng Zhu (Huaqiao University, China)

Riesz conjugate functions theorem for harmonic quasiconformal mappings

Lunch Break and Free Discussion

18:30–20:30 Banquette at Restaurant Hagi (Katahira Campus of Tohoku University)

August 22 (Thursday)

(Chair: Katsuhiko Matsuzaki)

09:00–09:50 Katsuya Ishizaki (Open University, Japan)

Complex oscillation results for solutions of linear differential equations

10:00–10:50 Hasi Wulan (Shantou University, China)

Semigroup of composition operators on analytic function spaces

11:10–12:00 Hideki Miyachi (Kanazawa University, Japan)

The L^1 - L^{∞} geometry on the Teichmüller spaces

Lunch Break

13:30–15:55 Parallel Session III (Large lecture hall and Middle lecture hall)

Online Session (Large lecture hall)

(Chair: Mark Elin)

16:00–16:50 Roman Bessonov (St.-Petersbourg Department of Steklov Mathematical Institute, Russia)

Propagation of waves on non-homogeneous strings

17:00–17:30 R. V. Palvelev (Lomonosov Moscow State University, Russia)

Approximation of branch points of an algebraic function from its holomorphic germ

17:40-18:10 Maria Stepanova (Lomonosov Moscow State University, Russia) Classification of holomorphically homogeneous CR manifolds

August 23 (Friday)

(Chair: Katsuya Ishizaki)

09:00–09:30 See Keong Lee (Universiti Sains Malaysia, Malaysia)

Logarithmic Coefficient Inequalities for Certain Families of Analytic Functions

09:40–10:10 Zhi-Tao Wen (Shantou University, China)

The possible orders of meromorphic solutions of linear difference equations with polynomial coefficients

(Chair: Anatoly Golberg)

 $10:\!30\text{--}11:\!20$ Mark Elin (Braude College of Engineering in Karmiel, Israel)

Non-linear resolvents of holomorphically accretive mappings

11:30–12:20 Vesna Todorcevic (Mathematical Institute of the Serbian Academy of Sciences and Arts, Serbia)

Chord-arc domains, HQC mappings and beyond

12:20–12:30 Closing addresses

Parallel Session I, August 19 (Monday)

Session A (Large lecture hall)

(Chair: Masashi Kisaka)

15:50–16:10 Jiaxing Huang (Shenzhen University, China)

The limiting set of iterations of entire functions on wandering domains

16:15–16:35 M.Keerthana Reddy (IIT Madras, India) Modified Bohr Phenomena for some classes of functions

16:40–17:00 Vibhuti Arora (National Institute of Technology Calicut, India) Bohr-Rogosinski type inequalities for concave univalent functions

17:05–17:25 Shankey Kumar (Indian Institute of Technology Madras, India)

A generalization of the Bohr inequality and its applications

Session B (Middle lecture hall)

(Chair: Atsushi Hayashimoto)

15:50–16:10 Kazuki Kudomi (Tohoku University, Japan)
Fourier Transforms of Holonomic D-modules on the Complex Affine Line

16:15–16:35 Kit Ian Kou (University of Macau, Macau) Robust signal recovery associated with the prolate spherical wave functions

(Chair: Noriaki Suzuki)

16:40–17:00 Atsushi Hayashimoto (Nagano National College of Technology, Japan)

Continuous non-extendability and holomorphic extendability of proper holomorphic mappings

17:05–17:25 Jiang Yan (Hunan Institute of Science and Technology, China)

Geometric properties of harmonic shears on the exterior of the unit disk

Parallel Session II, August 20 (Tuesday)

Session A (Large lecture hall)

(Chair: Jianfeng Zhu)

15:50–16:10 Limei Wang (University of International Business and Economics, China) Range problems of shifted hypergeometric functions

16:15–16:35 Xiaoyuan Wang (Nanjing University of Science and Technology, China)

Univalence and quasiconformal extension criteria involving pre-Schwarzian and Schwarzian derivatives

16:40–17:00 Tatsuhiro Honda (Senshu University, Japan) Bohr's phenomena on a complex Banach space 17:05–17:25 Arshiya Farhath.G (Pondicherry University, India) Schwarz's Lemma and Beyond

17:30–17:50 Gangqiang Chen (Nanchang University and Tohoku University)

Study on the n-th Derivative of Bounded Analytic Functions

Session B (Middle lecture hall)

(Chair: Hiroaki Aikawa)

15:50–16:10 Kentaro Hirata (Hiroshima University, Japan)

Boundary growth rates of superharmonic functions satisfying sublinear inequalities in the unit ball of \mathbb{C}^N

16:15–16:35 Noriaki Suzuki (Meijo University, Japan)

Norm estimates of higher order Hermite-Fejér interpolation for an Erdös-type weight

16:40–17:00 Takeru Asaka (Tohoku University)

Earthquake theorem for cluster algebras of finite type

17:05–17:25 Shun Kumagai (Kyushu University, Japan)

Veech groups and tiling closures of origamis

17:30–17:50 Sanju Mandal (Jadavpur University, India)

Normality criterion concerning total derivatives of holomorphic functions in \mathbb{C}^n

Parallel Session III, August 22 (Thursday)

Session A (Large lecture hall)

(Chair: Rakesh Parmar)

13:30–13:50 Masayo Fujimura (National Defense Academy, Japan)

On the centers of Blaschke polygons

13:55–14:15 Souvik Biswas (Indian Institute of Technology Kharagpur, India)

Distortion, Radius of Concavity and Several Other Radii Results for Certain Classes of Functions

14:20–14:40 Jasbir Parashar (Indian Institute of Technology Ropar, India)

On meromorphic harmonic functions with a pole at the origin

14:45–15:05 Sambhunath Sen (Indian Institute of Technology Kharagpur, India)

Bounds for the Derivative of Certain Meromorphic Functions and on Meromorphic Bloch-type Functions

15:10–15:30 Sheetal Wankhede (IIT Indore, India)

Univalence of horizontal shear of Cesàro type transforms

Session B (Middle lecture hall)

(Chair: Tsz On Mario Chan)

- 13:30–13:50 Lijie Sun (Yamaguchi University, Japan) Geometric structures on the Heisenberg group
- 13:55–14:15 Fanning Meng (Guangzhou University, China)
 On Yau sequence over complete intersection surface singularities of Brieskorn type
- 14:20–14:40 Atsushi Yamamori (Fukuoka Institute of Technology, Japan) The Bergman kernel of Roos type domains: explicit forms and zeros
- 14:45–15:05 Shota Kikuchi (National Institute of Technology, Suzuka College, Japan)
 On the Azukawa pseudometric defined from the pluricomplex Green function with poles along subvarieties
- 15:10–15:30 Takahiro Aoi (National Institute of Technology, Wakayama College, Japan) Skoda-Zeriahi type integrability and entropy compactness for Poincaré type Kähler metrics
- 15:35–15:55 Xiao-Min Li (Ocean University of China, China)

 On a question of Gary G. Gundersen concerning meromorphic functions sharing three distinct values IM and a fourth value CM