

NCTS 2023 Conference on Differential Geometry and Geometric Analysis

16-18, December

ALBUM

Registration: [Click here](#)

Agenda: [Click here](#) (2023.12.16 update)

SPEAKERS:

Jeffrey Case (Penn State University) [Abstract](#)

Alice Chang (Princeton University) [Abstract](#)

YuXin Ge (Institut de Mathématiques de Toulouse) [Abstract](#)

Changfeng Gui (University of Texas) [Abstract](#)

Kengo Hirachi (University of Tokyo) [Abstract](#)

Pak-Tung Ho (Tamkang University) [Abstract](#)

Sanghoon Lee (KIAS) [Abstract](#)

Andrea Malchiodi (Scuola Normale Superiore) [Abstract](#)

Taiji Marugame (The University of Electro-Communications) [Abstract](#)

Stephen McKeown (University of Texas) [Abstract](#)

Jie Qing (University of California, Santa Cruz) [Abstract](#)

Yum-Tong Siu (Harvard University) [Abstract](#)

Yi Wang (Johns Hopkins University) [Abstract](#)

Paul Yang (Princeton University) [Abstract](#)

Ruobing Zhang (Princeton University) [Abstract](#)

Organizers:

Hung-Lin Chiu (National Tsing Hua University)

Chin-Yu Hsiao (Academia Sinica)

Paul Yang (Princeton University)

Event Venue

R101,1F, General Building III (Department of Mathematics)

National Tsing Hua University



NCTS 2023 Conference on Differential Geometry and Geometric Analysis

Date: Dec. 16, 2023

09:30–09:55 **Registration**

10:00–10:50 *On bi-Lipschitz equivalence of a class of non-conformally flat spheres* **Alice Chang**

10:50–11:10 **Tea Break**

11:10–12:00 *Some elliptic Neumann problems for Einstein's equations* **Stephen McKeown**

12:00–14:00 **Lunch Break**

14:00–14:50 *On asymptotic behavior of p -superharmonic functions at singularities* **Jie Qing**

14:50–15:10 **Tea Break**

15:10–16:00 *Compactness of asymptotically hyperbolic Einstein manifolds* **YuXin Ge**

16:20–17:10 *Recent developments in the collapsing geometry of Einstein manifolds* **Ruobing Zhang**

17:30– **Reception**

Date: Dec. 17, 2023

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|--------------------|---|-----------------------|
| 10:00–10:50 | <i>Differential Relations for Multiplier Ideal Sheaves in $\bar{\partial}$ Estimates</i> | Yum-Tong Siu |
| 10:50–11:10 | Tea Break | |
| 11:10–12:00 | <i>Q-prime curvatures and renormalization of Chern classes for strictly pseudoconvex domains</i> | Kengo Hirachi |
| 12:00–14:00 | Lunch Break | |
| 14:00–14:50 | <i>Hyperkahler ambient metrics associated with twistor CR manifolds</i> | Taiji Marugame |
| 14:50–15:10 | Tea Break | |
| 15:10–16:00 | <i>The differential geometry of curves in 3-dimensional pseudohermitian manifolds</i> | Pak-Tung Ho |
| 16:20–17:10 | <i>Liouville-type theorems for adapted metrics of upper half-plane model of hyperbolic space</i> | Sanghoon Lee |

Date: Dec. 18, 2023

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|--------------------|---|-------------------------|
| 10:00–10:50 | <i>Developing maps of CR spherical manifolds</i> | Paul Yang |
| 10:50–11:10 | Tea Break | |
| 11:10–12:00 | <i>A general nonuniqueness theorem for Yamabe-type problems in conformal geometry</i> | Jeffrey Case |
| 12:00–14:00 | Lunch Break | |
| 14:00–14:50 | <i>Some New Inequalities in Analysis and Geometry</i> | Changfeng Gui |
| 14:50–15:10 | Tea Break | |
| 15:10–16:00 | <i>Existence of fully nonlinear Yamabe metrics on noncompact manifolds</i> | Yi Wang |
| 16:20–17:10 | <i>On the role of embeddability in conformal sub-Riemannian geometry</i> | Andrea Malchiodi |
| 18:00– | Banquet | |