THE UNIVERSITY **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

IMR-IoM
Workshop on Complex Geometry 2025

February 12 - 14, 2025
Room 210, Run Run Shaw Building, HKU

	February 12, 2025 (Wednesday)	February 13, 2025 (Thursday)	February 14, 2025 (Friday)
09:50 – 10:00	*Opening Remarks*		
10:00 – 11:00	Xiangyu ZHOU	Cong DING	Shan-Tai CHAN
11:00 – 11:30	*Coffee Break*		
11:30 – 12:30	Kwok-Kin WONG	Baohua FU	Zheng HUA
12:30 – 14:00	*Lunch*		
14:00 – 15:00	Wenjuan PENG	Kenneth Chung-Tak CHIU	Siqi HE
15:00 – 16:00	Tuen-Wai NG	Jie LIU	Qian TANG
16:00 – 16:30	*Coffee Break*		
16:30 – 17:30	Jinsong LIU	Ngaiming MOK	Wangjian JIAN

Organizers: Baohua FU, Ngaiming MOK and Tuen-Wai NG

Sponsored by Glorious Sun Charity Fund

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Program

09:50 - 10:00   *Opening Remarks*

10:00 - 11:00   **Xiangyu ZHOU**, Chinese Academy of Sciences
Several Complex Variables at IoM

11:00 - 11:30   Coffee Break (Rm 320A)

11:30 - 12:30   **Kwok-Kin WONG**, Shenzhen University
Nonexistence of level structures and volume estimates on Carathéodory manifolds

12:30 - 14:00   Lunch

14:00 - 15:00   **Wenjuan PENG**, Chinese Academy of Sciences
Parabolic implosion surgery for rational maps

15:00 - 16:00   **Tuen-Wai NG**, HKU
Brody curves on Fermat surface of degree six

16:00 - 16:30   Coffee Break (Rm 320A)

16:30 - 17:30   **Jinsong LIU**, Chinese Academy of Sciences
L^p norm of truncated Riesz transform and an improved dimension-free L^p estimate for maximal Riesz transform

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Program

10:00 - 11:00 **Cong DING**, Shenzhen University
Rigidity of smooth Schubert cycles in rational homogeneous spaces of higher Picard number

11:00 - 11:30 Coffee Break (Rm 320A)

11:30 - 12:30 **Baohua FU**, Chinese Academy of Sciences
Symplectic singularlties arisng from cotangent bundles

12:30 - 14:00 Lunch

14:00 - 15:00 **Kenneth Chung-Tak CHIU**, HKU
Complex cellular structures, slope-determinant method, and hypersurface coverings of rational points

15:00 - 16:00 **Jie LIU**, Chinese Academy of Sciences
Kawamata—Miyaoka inequality for Q-Fano varieties

16:00 - 16:30 Coffee Break (Rm 320A)

16:30 - 17:30 **Ngaiming MOK**, HKU
The canonical height for abelian varieties over complex function fields

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10:00 - 11:00   **Shan-Tai CHAN**, Chinese Academy of Sciences
Geometry of local holomorphic maps between Kähler manifolds preserving (p, p)-forms

11:00 - 11:30   Coffee Break (Rm 320A)

11:30 - 12:30   **Zheng HUA**, HKU
Modular Poisson Structure Associated with Degeneration of Elliptic Curves

12:30 - 14:00   Lunch

14:00 - 15:00   **Siqi HE**, Chinese Academy of Sciences
Z/2 harmonic forms, harmonic maps into R-trees, and compactifications of character variety

15:00 - 16:00   **Qian TANG**, HKU
Isomonodromy Equations and the Inverse Monodromy Problem

16:00 - 16:30   Coffee Break (Rm 320A)

16:30 - 17:30   **Wangjian JIAN**, Chinese Academy of Sciences
Recent progresses of the Analytic MMP