

Arithmetic Dynamics and Diophantine Geometry

25 Aug 2025–29 Aug 2025



Organizing Committee

Tien-Cuong Dinh

National University of Singapore

Ziyang Gao

University of California, Los Angeles

Jit Wu Yap

Harvard University

De-Qi Zhang

National University of Singapore

Venue



Executive Seminar Room
Institute for Mathematical Sciences
Block S17 Level 3,
10 Lower Kent Ridge Road
Singapore 119706

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For more information: <https://ims.nus.edu.sg/events/arithmeticdynamics>

Arithmetic Dynamics and Diophantine Geometry

25 Aug 2025–29 Aug 2025

Monday, 25 August 2025

Time	Title	Speaker
0910–0930	Registration	
0930–1030	<i>Mini Course</i> Adelic Line Bundles over Quasi-projective Varieties (Part I)	Ziyang Gao <i>University of California, Los Angeles, USA</i>
1030–1050	Short Break	
1050–1150	<i>Mini Course</i> Zariski Dense Orbit Conjecture (Part I)	Junyi Xie <i>Peking University, China</i>
1150–1400	Lunch Break	
1400–1500	<i>Mini Course</i> Julia sets, energy pairing and uniform boundedness for $z^2 + c$ (Part I)	Hexi Ye <i>Zhejiang University, China</i>
1500–1515	Short Break	
1515–1545	<i>Lightning Talks</i>	
	Quantitative Mordell Conjecture	Jiawei Yu <i>Peking University, China</i>
	Arithmetic Degrees are Cohomological Lyapunov Multipliers	She Yang <i>Peking University, China</i>
1545–1615	Coffee Break	
1615–1715	The Story of the Ceresa Cycle	Wanlin Li <i>Washington University at Saint Louis, USA</i>

Tuesday, 26 August 2025

Time	Title	Speaker
0920–0930	Registration	
0930–1030	<i>Mini Course</i> Adelic Line Bundles over Quasi-projective Varieties (Part II)	Ziyang Gao <i>University of California, Los Angeles, USA</i>
1030–1050	Short Break	
1050–1150	<i>Mini Course</i> Zariski Dense Orbit Conjecture (Part II)	Junyi Xie <i>Peking University, China</i>
1150–1400	Lunch Break	

Tuesday, 26 August 2025		
Time	Title	Speaker
1400–1500	Elliptic Surfaces, Equidistribution, and Bifurcations	Laura DeMarco <i>Harvard University, USA</i>
1500–1515	Short Break	
1515–1545	<i>Lightning Talks</i>	
	Adelic Line Bundles and Beilinson-Bloch Height	Yinchong Song <i>Peking University, China</i>
	Preimages Question and Dynamical Cancellations	Xiao Zhong <i>University of Waterloo, Canada</i>
1545–1615	Coffee Break	
1615–1715	Algebraic Families of Weakly Polarized Endomorphisms	Yugang Zhang <i>Université Paris-Saclay, France</i>
Wednesday, 27 August 2025		
Time	Title	Speaker
0920–0930	Registration	
0930–1030	<i>Mini Course</i> Adelic Line Bundles over Quasi-projective Varieties (Part III)	Ziyang Gao <i>University of California, Los Angeles, USA</i>
1030–1050	Group Photo & Short Break	
1050–1150	<i>Mini Course</i> Julia sets, energy pairing and uniform boundedness for $z^2 + c$ (Part II)	Hexi Ye <i>Zhejiang University, China</i>
1150–1200	Short Break	
1200–1300	Degenerations of Abelian Varieties by Ultrafilters	Jit Wu Yap <i>Harvard University, USA</i>
1300–1430	<i>Lunch Reception at IMS</i>	
1430–1600	Free Discussion	IMS Collaboration Space
Thursday, 28 August 2025		
Time	Title	Speaker
0920–0930	Registration	
0930–1030	<i>Mini Course</i> Zariski Dense Orbit Conjecture (Part III)	Junyi Xie <i>Peking University, China</i>
1030–1050	Short Break	
1050–1150	<i>Mini Course</i> Julia sets, energy pairing and uniform boundedness for $z^2 + c$ (Part III)	Hexi Ye <i>Zhejiang University, China</i>

Thursday, 28 August 2025		
Time	Title	Speaker
1150–1400	Lunch Break	
1400–1500	Multiplier Spectrum and Moduli Space of Rational Maps	Zhuchao Ji <i>Westlake University, China</i>
1500–1515	Short Break	
1515–1545	<i>Lightning Talks</i>	
	When do Two Iterated Rational Functions have Finitely many Common Zeros?	Chatchai Noytaptim <i>University of Waterloo, Canada</i>
	Rational Self-maps of Complex Projective Surfaces with a Regular Iterate	Sina Saleh <i>Harvard University, USA</i>
1545–1615	Coffee Break	
1615–1715	Effective Equidistribution in Homogeneous Spaces and Restricted Projection Theorems	Lei Yang <i>National University of Singapore, Singapore</i>
Friday, 29 August 2025		
Time	Title	Speaker
0920–0930	Registration	
0930–1030	<i>Mini Course</i> Zariski Dense Orbit Conjecture (Part IV)	Junyi Xie <i>Peking University, China</i>
1030–1050	Short Break	
1050–1150	<i>Mini Course</i> Adelic Line Bundles over Quasi-projective Varieties (Part IV)	Ziyang Gao <i>University of California, Los Angeles, USA</i>
1150–1200	Short Break	
1200–1300	Lower Bounds for Galois Orbits of Pre-periodic Points and Canonical Heights of pcf Polynomials	Harry Schmidt <i>University of Warwick, UK</i>