

## Recent Applications of Model Theory

Workshop on applications of model theory in complex geometry and differential algebra  
(7–11 July 2025)



### ORGANIZING COMMITTEE

Artem Chernikov  
*University of California, Los Angeles*

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*University of Illinois Chicago*

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*University of Haifa*

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*National University of Singapore*

Jinhe Ye  
*University of Oxford*



### Venue

**1.30–3.30 p.m.**

IMS Executive Seminar Room  
Block S17, Level 3

**4.00–6.00 p.m.**

Dept. of Mathematics  
Block S17-04-05

10 Lower Kent Ridge Rd Singapore 119076

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### Monday, 7 July 2025

Time	Title	Speaker
1320–1330	Registration	
Venue	IMS Executive Seminar Room	
1330–1430	Definable Groups in Geometric Fields with a Generic Derivation	Anand Pillay <i>University of Notre Dame, USA</i>
1430–1530	Minimality of Difference-differential Equations	Wei Li <i>Chinese Academy of Sciences, China</i>
1530–1600	<i>Coffee Break</i>	
Venue	S17-04-05	
1600–1700	Forking in Differential Fields of Positive Characteristic	Piotr Kowalski <i>University of Wrocław, Poland</i>
1700–1800	Stable D-finite Functions	Shaoshi Chen <i>Chinese Academic of Sciences, China</i>

### Tuesday, 8 July 2025

Time	Title	Speaker
1000–1200	Free Discussion	
1200–1330	<i>Lunch Break</i>	
Venue	IMS Executive Seminar Room	
1330–1430	<u><i>Joint Colloquium Talk</i></u> Transseries and Hardy Fields	Lou van den Dries <i>The University of Illinois Urbana-Champaign, USA</i>
1430–1500	<i>Coffee Break</i>	
1500–1600	Reconstructing Abelian Varieties Using Model Theory	Ben Castle <i>University of Illinois at Urbana-Champaign, USA</i>
1600–1700	Definable Rings, Associative Algebras, and O-minimality	Analisa Conversano <i>Massey University, New Zealand</i>

Wednesday, 9 July 2025		
Time	Title	Speaker
1320–1330	Registration	
Venue	IMS Executive Seminar Room	
1330–1430	Equidistribution of Polynomially Bounded o-minimal Curves in Homogeneous Spaces	Nimish A. Shah <i>The Ohio State University, USA</i>
1430–1530	Semi-constant Families of Semi-abelian Varieties	Harry Schmidt <i>University of Warwick, UK</i>
1530–1600	<i>Group Photo &amp; Coffee Break</i>	
Venue	S17-04-05	
1600–1700	Images of Algebraic Sets under Lattice Quotients	Spencer Dembner <i>Stanford University, USA</i>
1700–1800	Tameness, Complexity, and the Space of Quantum Field Theories	Mick van Vliet <i>Utrecht University, Netherlands</i>
Thursday, 10 July 2025		
Time	Title	Speaker
1320–1330	Registration	
Venue	IMS Executive Seminar Room	
1330–1430	Projective Curves and Weak Second-order Logic	Alessandro Berarducci <i>University of Pisa, Italy</i>
1430–1530	Definable $C^r$ Structures on Definable Topological Groups: d-minimal Case	Masato Fujita <i>Japan Coast Guard Academy, Japan</i>
1530–1600	Coffee Break	
Venue	S17-04-05	
1600–1700	Trace Definability	Erik Walsberg <i>USA</i>
1700–1800	Continuous Selection Problems in Tame Expansions of Real Closed Fields	Athipat Thamrongthanayalak <i>Chulalongkorn University, Thailand</i>
1830	<u><i>Conference Dinner (by invitation only)</i></u> One-way transfer from IMS to Bumbu Restaurant	

Friday, 11 July 2025		
Time	Title	Speaker
1320–1330	Registration	
Venue	IMS Executive Seminar Room	
1330–1430	Sharply o-minimal Structures	Dmitry Novikov <i>Weizmann institute of Science, Israel</i>
1430–1530	Likely Intersections in Powers of the Multiplicative Group	Francesco Gallinaro <i>University of Pisa, Italy</i>