



西安交通大学  
XI'AN JIAOTONG UNIVERSITY

# Speakers

Zhi QI (Hangzhou)

Emmanuel ROYER (Clermont-Ferrand)

Han WU (Lausanne)

Jie WU (Paris)

Qiang WU (Chongqing)

December 04-06, 2018

## LECTURE SERIES IN NUMBER THEORY

Topics will include

1. Bessel functions over complex numbers
2. Stepanov method for algebraic exponential sums
3. Hooley-Huxley-Motohashi method for averages of arithmetic functions
4. L-functions and random matrix theory
5. Quasimodular forms and weak Jacobi forms
6. Kloosterman sums from a probabilistic point of view
7. Schur-Siegel-Smyth trace problem



国家天元数学西北中心

Tianyuan Mathematical Center in Northwest China

西安数学与数学技术研究院

Xi'an International Academy for Mathematics and Mathematical Technology

# Lecture Series in Number Theory

December 04-06, 2018 @ XJTU / Main Building, B-305

	December 04 (TUE)	December 05 (WED)	December 06 (THU)
09:00-10:00	<b>Emmanuel ROYER (Mini Course)</b> <i>L-functions and random matrix theory</i>	<b>Zhi QI (Mini Course)</b> <i>Integral formulae for Bessel functions over complex numbers and their applications</i>	<b>Emmanuel ROYER (Mini Course)</b> <i>Algebraic structures on extensions of modular forms</i>
	BREAK		
10:20-11:20	<b>Emmanuel ROYER (Mini Course)</b> <i>Quasimodular forms and square tiled surfaces</i>	<b>Zhi QI (Mini Course)</b> <i>Integral formulae for Bessel functions over complex numbers and their applications</i>	<b>Emmanuel ROYER (Mini Course)</b> <i>Kloosterman sums from a probabilistic point of view</i>
	LUNCH		
14:00-15:00	<b>Zhi QI (Mini Course)</b> <i>Integral formulae for Bessel functions over complex numbers and their applications</i>	<b>Jie WU (Research Talk)</b> <i>Hooley-Huxley-Motohashi method and applications</i>	<b>Zhi QI (Mini Course)</b> <i>Integral formulae for Bessel functions over complex numbers and their applications</i>
	BREAK		
15:10-16:10	<b>Han WU (Mini Course)</b> <i>Introduction to algebraic exponential sums</i>	<b>Qiang WU (Research Talk)</b> <i>Schur-Siegel-Smyth trace problem in computational number theory</i>	<b>Han WU (Mini Course)</b> <i>Introduction to algebraic exponential sums</i>
	BREAK		
16:30-17:30	<b>Han WU (Mini Course)</b> <i>Introduction to algebraic exponential sums</i>	<b>Han WU (Research Talk)</b> <i>On Kuznetsov-Bykovskii formula</i>	<b>Han WU (Mini Course)</b> <i>Introduction to algebraic exponential sums</i>
	DINNER		