

HKU Number Theory Days 2019

| | Day 1 July 4, 2019 (Thursday) | Day 2 July 8, 2019 (Monday) | Day 3 July 9, 2019 (Tuesday) | Day 4 July 15, 2019 (Monday) | Day 5 July 16, 2019 (Tuesday) | Day 6 July 17, 2019 (Wednesday) | Day 7 July 19, 2019 (Friday) |
|---------------|--|-----------------------------------|---|--|-----------------------------------|--|-----------------------------------|
| 9:30 - 10:30 | | 9:30 - 10:30 Kumar Murty | 9:30 - 10:30 Karl Mahlburg | 9:30 - 10:30 Yifan Yang | 9:30 - 10:30 James Maynard | 9:30 - 10:30 Youn-Seo Choi | 9:30 - 10:30 Ram Murty |
| 10:30 - 11:30 | | 10:30 - 11:00 Coffee/tea break | 10:30 - 11:00 Coffee/tea break | 10:30 - 11:00 Coffee/tea break | 10:30 - 11:00 Coffee/tea break | 10:30 - 11:00 Coffee/tea break | 10:30 - 11:00 Coffee/tea break |
| 11:30 - 12:30 | | 11:00 - 12:00 Takao Yamazaki | 11:00 - 12:00 Takao Yamazaki | 11:00 - 12:00 Jia-Wei Guo | 11:00 - 12:00 William Yun Chen | 11:00 - 12:00 Ping Xi | 11:00 - 12:00 Srinivas Kotyada |
| 12:30 - 13:30 | | 12:00 - 14:00 Lunch | 12:00 - 14:00 Lunch | 12:00 - 14:00 Lunch | 12:00 - 14:00 Lunch | 12:00 - 14:00 Lunch | 12:00 - 14:00 Lunch |
| 13:30 - 14:30 | 14:00 - 15:00 Ling Long | 14:00 - 15:00 Ling Long | 14:00 - 16:00 Break | 14:00 - 15:00 Sudhir Kumar Pujahari | 14:00 - 15:00 Karl Mahlburg | 14:00 - 17:00 Break | 14:00 - 16:00 Break |
| 14:30 - 15:30 | 15:00 - 16:00 Break | 15:00 - 15:15 Break | | 15:00 - 15:15 Break | 15:00 - 15:15 Break | | |
| 15:30 - 16:30 | 16:00 - 17:00 Kumar Murty (Colloquium) | 15:15 - 16:15 Yifan Yang | 15:15 - 16:15 William Yun Chen | 15:15 - 16:15 Shuichi Hayashida | | | |
| 16:30 - 17:30 | | 16:15 - 16:30 Break | 16:00 - 17:00 Wenzhi Luo (Colloquium) | 16:15 - 16:30 Break | | | |
| 17:30 - 18:30 | | 16:30 - 17:30 Wenzhi Luo | | | 16:30 - 17:30 Youn-Seo Choi | Frontiers of Mathematics Lecture # 17:30 - 18:30 Ram Murty (Tea Reception starts at 17:00) | |

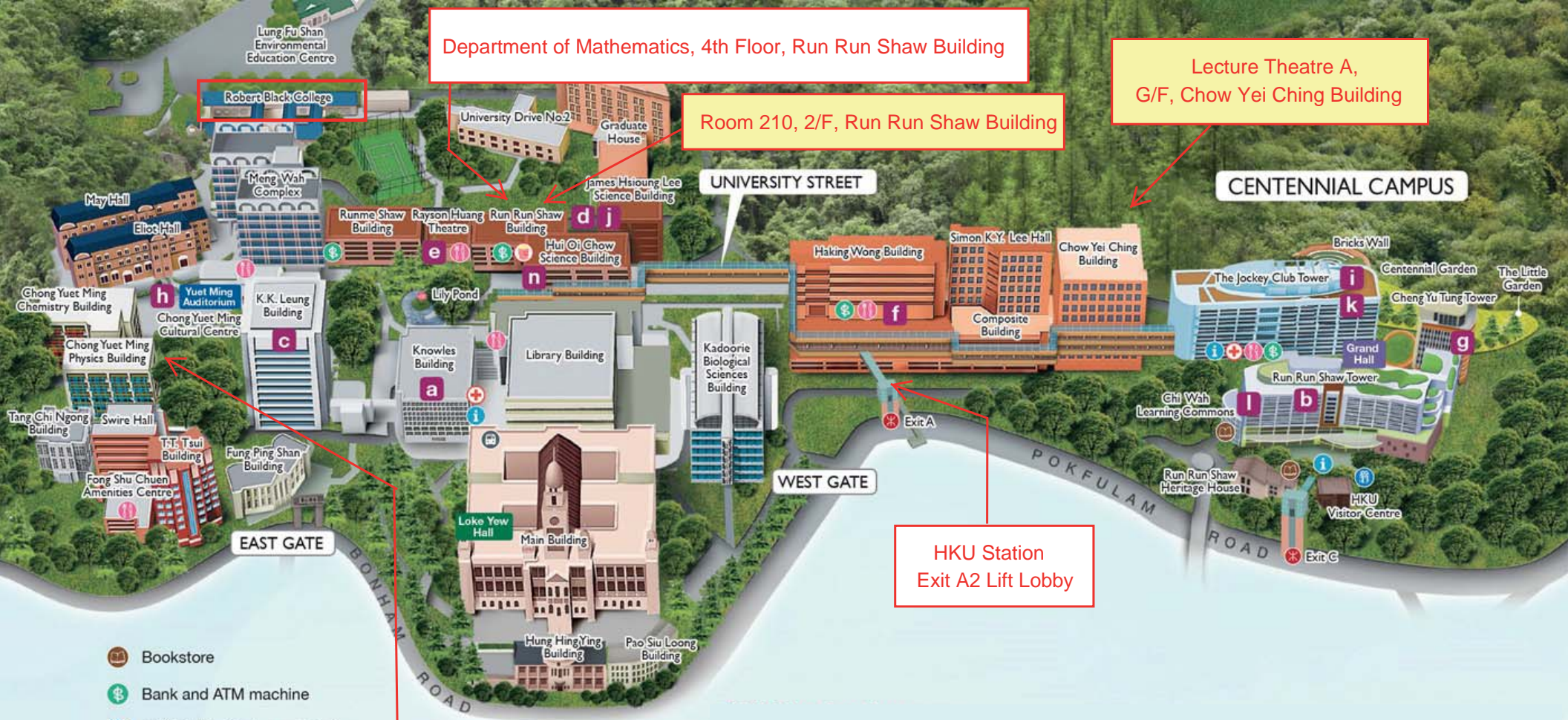
Venue:

Room 210, 2/F, Run Run Shaw Building

P4 (CYPP4), Chong Yuet Ming Physics Building

Lecture Theatre A, G/F, Chow Yei Ching Building

Frontiers of Mathematics Lecture: [click here for the poster](#)



Department of Mathematics, 4th Floor, Run Run Shaw Building

Lecture Theatre A,
G/F, Chow Yei Ching Building

Room 210, 2/F, Run Run Shaw Building

P4 (CYPP4),
Chong Yuet Ming Physics Building

-  Bookstore
-  Bank and ATM machine
-  HKU Visitor Centre and Gallery
-  MTR HKU Station
-  Restaurant / Canteen
-  Loke Yew Hall
-  Grand Hall, Lee Shau Kee Lecture Centre (LG/F)
-  Yuet Ming Auditorium, Chong Yuet Ming Cultural Centre

HKU Number Theory Days 2019

JULY 4, 2019
THURSDAY

Venue: Room 210, 2/F, Run Run Shaw Building

| Time | Speaker/Event | Title |
|---------------|---------------|---|
| 14:00 - 15:00 | Ling Long | Hypergeometric functions over finite fields |
| 15:00 - 16:00 | Break | |
| 16:00 - 17:00 | Kumar Murty | Colloquium - The power map modulo a prime |

JULY 8, 2019
MONDAY

Venue: P4 (CYPP4), Chong Yuet Ming Physics Building

| Time | Speaker/Event | Title |
|---------------|------------------|--|
| 9:30 - 10:30 | Kumar Murty | The Lindelöf class of L-functions |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | Takao Yamazaki | Arithmetic of generalized Jacobians of modular curves, I |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 15:00 | Ling Long | Hypergeometric Supercongruences |
| 15:00 - 15:15 | Break | |
| 15:15 - 16:15 | Yifan Yang | Equations of hyperelliptic Shimura curves |
| 16:15 - 16:30 | Break | |
| 16:30 - 17:30 | Wenzhi Luo | On Hecke eigenvalues of Maass cusp forms |

**JULY 9, 2019
TUESDAY**

Venue: P4 (CYPP4), Chong Yuet Ming Physics Building

| Time | Speaker/Event | Title |
|---------------|----------------------|--|
| 9:30 - 10:30 | Karl Mahlburg | Quantum modular forms and plumbing graphs of 3-manifolds |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | Takao Yamazaki | Arithmetic of generalized Jacobians of modular curves, II |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 16:00 | Break | |
| 16:00 - 17:00 | Wenzhi Luo | Colloquium - Automorphic shifted convolution in higher rank and Vinogradov mean value conjecture |

**JULY 15, 2019
MONDAY**

Venue: P4 (CYPP4), Chong Yuet Ming Physics Building

| Time | Speaker/Event | Title |
|---------------|-----------------------|---|
| 9:30 - 10:30 | Yifan Yang | Quaternionic loci in Siegel's modular threefold |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | Jia-Wei Guo | Class number relations arising from intersections of Shimura curves and Humbert surfaces |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 15:00 | Sudhir Kumar Pujahari | Zeros of generalized Davenport-Heilbronn function |
| 15:00 - 15:15 | Break | |
| 15:15 - 16:15 | William Yun Chen | Nonabelian level structures on elliptic curves: Moduli interpretations for noncongruence modular curves |

**JULY 16, 2019
TUESDAY**

Venue: P4 (CYPP4), Chong Yuet Ming Physics Building

| Time | Speaker/Event | Title |
|---------------|-------------------|---|
| 9:30 - 10:30 | James Maynard | Small fractional parts of polynomials |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | William Yun Chen | Nonabelian level structures on elliptic curves: Metabelian and $PSL(2,p)$ level structures |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 15:00 | Karl Mahlburg | Characters of affine Lie algebras and Sum-Product Identities |
| 15:00 - 15:15 | Break | |
| 15:15 - 16:15 | Shuichi Hayashida | Maass relations and certain Dirichlet series associated to Siegel modular forms |
| 16:15 - 16:30 | Break | |
| 16:30 - 17:30 | Youn-Seo Choi | The q -hypergeometric series which S. Ramanujan seemed to like most |

**JULY 17, 2019
WEDNESDAY**

*Venue: P4 (CYPP4), Chong Yuet Ming Physics Building/
Lecture Theatre A, G/F, Chow Yei Ching Building*

| Time | Speaker/Event | Title |
|---------------|------------------|---|
| 9:30 - 10:30 | Youn-Seo Choi | The q -hypergeometric series related to Ramanujan's mock theta functions |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | Ping Xi | Arithmetic exponent pairs for trace functions and applications |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 17:00 | Break | |
| 17:00 - 18:30 | Ram Murty | <u>Frontiers of Mathematics Lectures:</u> <u>The Central Limit Theorem in Algebra and</u> <u>Number Theory</u> Time: 17:30 - 18:30 (Tea Reception starts at 17:00) Venue: Lecture Theatre A, G/F, Chow Yei Ching Building |

JULY 19, 2019
FRIDAY

Venue: P4 (CYPP4), Chong Yuet Ming Physics Building

| Time | Speaker/Event | Title |
|---------------|----------------------|--|
| 9:30 - 10:30 | Ram Murty | Prime divisors of Fourier coefficients of modular forms at shifted prime arguments |
| 10:30 - 11:00 | Coffee/tea break | |
| 11:00 - 12:00 | Srinivas Kotyada | On the zeros of zeta-functions on the critical line |
| 12:00 - 14:00 | Lunch | |
| 14:00 - 16:00 | Break | |
| 16:00 - 17:00 | James Maynard | Colloquium - How well can you approximate real numbers by fractions? |