

Program day 1

Wednesday, October 3

16:00 – 16:50 [KIAS] Public Lecture 1

Room 401, see p.30

- How to tame massive data in an uncertain world
- Hyungju Park, Ajou University

17:00 – 18:10 [KIAS] Public Lecture 2

Room 401, see p.30

- Visualising symmetry: A journey on the border of art and math
- Jürgen Richter-Gebert, Technical University of Munich

Program day 2

Thursday, October 4

• Slot A (09:00 – 10:00)

09:00 – 10:00 Special Sessions

Code.	Session Title	Room,	see
SS-01.	Riemannian Geometry and Related Fields	314,	p.31
SS-02.	Complex Geometry	315,	p.32
SS-04.	Logic and Computing	304,	p.33
SS-05.	Advances on Automorphic Forms and Related Topics	305,	p.34
SS-06.	Symplectic Geometry	311,	p.35
SS-07.	Quantum Attack Models and Post Quantum Cryptography	321,	p.36
SS-08.	Advances in Computational PDEs	320,	p.37
SS-10.	Aperiodic Order and Dynamics	319,	p.38
SS-11.	Stochastic Processes and Related Fields	309,	p.39
SS-12.	Regularity Theory of Nonlinear Elliptic, Parabolic and Variational Problems	324,	p.40
SS-13.	Nonlinear Partial Differential Equations: Hyperbolic and Mixed Problems	325,	p.41
SS-15.	Structured Nonparametric and High-Dimensional Statistics	310,	p.42
SS-17.	Inverse Problems and Imaging Science	328,	p.44

10:10 – 10:20 **Opening Ceremony** Room 401, see p.18

10:20 – 11:10 **Plenary Lecture 1** Room 401, see p.29

- Curves and surfaces with constant nonlocal mean curvature
Tobias Weth, Goethe-University Frankfurt

11:10 – 12:00 **Plenary Lecture 2** Room 401, see p.29

- Hirzebruch-type L^2 -signature defects and topology of dimension 3 and 4
Jae Choon Cha, POSTECH

12:00 – 12:10 **Group Photo** Place: Room 401

12:10 – 13:30 **Lunch**

• Slot B (13:30 – 15:30)

13:30 – 15:30 **Special Sessions**

Code.	Session Title	Room,	see
SS-01.	Riemannian Geometry and Related Fields	314,	p.31
SS-02.	Complex Geometry	315,	p.32
SS-04.	Logic and Computing	304,	p.33
SS-05.	Advances on Automorphic Forms and Related Topics	305,	p.34
SS-06.	Symplectic Geometry	311,	p.35
SS-07.	Quantum Attack Models and Post Quantum Cryptography	321,	p.36
SS-08.	Advances in Computational PDEs	320,	p.37
SS-10.	Aperiodic Order and Dynamics	319,	p.38
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SS-13.	Nonlinear Partial Differential Equations: Hyperbolic and Mixed Problems	325,	p.41
SS-15.	Structured Nonparametric and High-Dimensional Statistics	310,	p.43
SS-17.	Inverse Problems and Imaging Science	328,	p.44

16:00 – 17:00 **과학기술정보통신부 2019년 기초연구사업 운영방안(안) 설명회** Room 401, see p.53

Presentation on “The 2019 Provisional Operation Plans of the Basic Research Programme in the Science and Engineering Field”

(* This event will be conducted in Korean.)

17:00 – 18:00 **NRF-DFG Panel Discussion:** Room 401, see p.54

Promotion of Research Cooperation between Korea and Germany

(* This event will be conducted in English.)

• **Slot C (16:00 – 18:00)**

16:00 – 18:00 **Contributed Talks**

Code.	Session Title	Room,	see
AN I.	Analysis I	320,	p.47
AN II.	Analysis II	319,	p.48
GE.	Geometry	314,	p.48
TO.	Topology	315,	p.49
PS.	Probability and Statistics	309,	p.50
AM.	Applied Mathematics	328,	p.51

Program day 3

Friday, October 5

• **Slot D (09:00 – 10:00)**

09:00 – 10:00 **Special Sessions**

Code.	Session Title	Room,	see
SS-03.	Algebraic Surfaces, their Moduli and Related Topics	304,	p.32
SS-09.	Algebraic Geometry and Computer Vision	311,	p.37
SS-14.	Chemotactic and Fluid Dynamics	325,	p.41
SS-16.	Probability Theory and Applications	310,	p.43

Contributed Talks

Code.	Session Title	Room,	see
AL.	Algebra	305,	p.46
AN I.	Analysis I	320,	p.47
TO.	Topology	315,	p.49

10:20 – 11:10 **Plenary Lecture 3**

Room 401, see p.29

- [KIAS Plenary Lecture] The Eisenstein ideal in the theory of modular curves and their Jacobian varieties

Kenneth A. Ribet, University of California-Berkeley

11:10 – 12:00 **Plenary Lecture 4**

Room 401, see p.29

- Optimal transport, heat flow, and Ricci curvature on metric measure spaces

Karl-Theodor Sturm, Institute for Applied Mathematics, University of Bonn

12:00 – 13:30 **Lunch**

● **Slot E (13:30 – 15:30)**

13:30 – 15:30 **Special Sessions**

Code.	Session Title	Room,	see
SS-01.	Riemannian Geometry and Related Fields	314,	p.31
SS-02.	Complex Geometry	315,	p.32
SS-04.	Logic and Computing	304,	p.34
SS-05.	Advances on Automorphic Forms and Related Topics	305,	p.34
SS-06.	Symplectic Geometry	311,	p.35
SS-07.	Quantum Attack Models and Post Quantum Cryptography	321,	p.36
SS-08.	Advances in Computational PDEs	320,	p.37
SS-10.	Aperiodic Order and Dynamics	319,	p.39
SS-11.	Stochastic Processes and Related Fields	309,	p.40
SS-12.	Regularity Theory of Nonlinear Elliptic, Parabolic and Variational Problems	324,	p.40
SS-13.	Nonlinear Partial Differential Equations: Hyperbolic and Mixed Problems	325,	p.41
SS-15.	Structured Nonparametric and High-Dimensional Statistics	310,	p.43
SS-17.	Inverse Problems and Imaging Science	328,	p.45

16:00 – 18:00 **2018 KMS General Assembly
& Award Ceremony of KMS Prize**

Room 401, see p.18

(* This event will be conducted in Korean.)

18:10 – 20:00 **Banquet**

Room R201

(* A complimentary dinner reception is offered to registered persons.)

Program day 4

Saturday, October 6

• Slot F (09:00 – 10:00)

09:00 – 10:00 **Contributed Talks**

Code.	Session Title	Room,	see
AN I.	Analysis I	320,	p.47
TO.	Topology	315,	p.49
ME.	Mathematical Education	321,	p.51
DM.	Discrete Mathematics	324,	p.51

10:20 – 11:10 **Plenary Lecture 5**

Room 401, see p.29

- The KdV equation with almost periodic initial data
David Damanik, Rice University

11:10 – 12:00 **Plenary Lecture 6**

Room 401, see p.29

- $\bar{\partial}$ -Neumann problem and effective termination of Kohn algorithm for subelliptic multipliers
Sung Yeon Kim, KIAS

12:00 – 13:30 **Lunch**

• Slot G (13:30 – 15:30)

13:30 – 15:30 **Special Sessions**

Code.	Session Title	Room,	see
SS-03.	Algebraic Surfaces, their Moduli and Related Topics	304,	p.33
SS-09.	Algebraic Geometry and Computer Vision	311,	p.38
SS-14.	Chemotactic and Fluid Dynamics	325,	p.42
SS-16.	Probability Theory and Applications	310,	p.44

Contributed Talks

Code.	Session Title	Room,	see
AL.	Algebra	305,	p.46
AN I.	Analysis I	320,	p.47
GE.	Geometry	314,	p.49
TO.	Topology	315,	p.50
ME.	Mathematical Education	321,	p.51
DM.	Discrete Mathematics	324,	p.52

• Slot H (16:00 – 18:00)

16:00 – 18:00 **Special Sessions**

Code.	Session Title	Room,	see
SS-03.	Algebraic Surfaces, their Moduli and Related Topics	304,	p.33
SS-09.	Algebraic Geometry and Computer Vision	311,	p.38
SS-14.	Chemotactic and Fluid Dynamics	325,	p.42
SS-16.	Probability Theory and Applications	310,	p.44

Contributed Talks

Code.	Session Title	Room,	see
AL.	Algebra	305,	p.46
AN I.	Analysis I	320,	p.48
TO.	Topology	315,	p.50