

Symposium Program

Math/Applied Math/Statistics [MAS]

Symposium Chair: Sookkyung Lim (Univ of Cincinnati)

Co-Chairs: Chang-Ock Lee (KAIST), Myles Kim (Florida Polytechnic Univ)

Thursday, August 10, 2017

August 10 Thursday, 8:00-9:40 AM at Tide Water I

MAS-1 Session: Discrete Math/Discrete Modeling

Chair: Sung-Yell Song (Iowa State Univ), Co-Chair: Ji Young Choi (Shippensburg Univ)

8:00 AM	Partial geometric designs on vector spaces over finite fields Sung-Yell Song (Iowa State Univ)
8:25 AM	Digit Sum of an Integer Ji Young Choi (Shippensburg Univ)
8:50 AM	A mathematical model predicts a delayed insulin peak during an oral glucose tolerance test as a high risk factor for diabetes Joon Ha (National Institute of Health)
9:15 AM	Optimal Experimental Designs for Mixed Categorical and Continuous Responses Soohyun Kim (Arizona State University)

August 10 Thursday, 1:20-3:20 PM at Tide Water I

MAS-2 Session: Statistics in Data Science

Chair: Dong-Yun Kim (NIH), Co-Chair: Grace Hyun Kim (UCLA)

1:20 PM	HRCT Texture Feature Selection Using Particle Swam Optimization in Unbalanced Data Grace Hyun Kim (UCLA)
1:40 PM	A blinded Randomized Trial to Examine the Effect of Hip Muscle Retraining for Fall Prevention among Diabetic Patients Jimin Lee (Univ of North Carolina Asheville)
2:05 PM	Survey Nonresponse Study Using Standard Exploratory Data Analysis (EDA) Tools MoonJung Cho (U.S. Bureau of Labor Statistics)
2:30 PM	Analysis of Type-I hybrid censored data under constant-stress partially accelerated life testing Seunggeun Hyun (University of South Carolina Upstate)
2:55 PM	Continuous monitoring of patient accrual in multi-center clinical trials Dong-Yun Kim (National Institute of Health)

August 10, Thursday, 3:40-5:40 PM at Tide Water I

MAS/BME/BMP Interdisciplinary Session: Mathematical Aspects of Biology and Biomedical Engineering: Modeling, Simulation, and Analysis

Chair: Yeona Kang (Cornell), Co-Chair: In-Hyun Park (Yale)

3:40 PM	[Invited] Comparison to in vivo Image Analysis Techniques to Confirm Abnormal Microglial Activation in Multiple Sclerosis Yeona Kang (Cornell Univ)
4:00 PM	Social status-dependent habituation in zebrafish Choongseok Park (NC A&T State Univ) & Sungwoo Ahn (East Carolina Univ)
4:20 PM	A computational study on the mechanism of Epithelial cell polarization during the cell division Myles Kim (Florida Polytechnic Univ)
4:40 PM	A Mathematical Model of Calcium Crosstalk between the ER and Mitochondria Jung-Min Han (National Institute of Health)
5:00 PM	A Mathematical Structure of Diabetes on a Slow Manifold Joon Ha (National Institute of Health)
5:20 PM	Polymorphic transformation of rotating bacterial flagella in a viscous fluid Sookkyung Lim (Univ of Cincinnati)

Friday, August 11, 2017

August 11 Friday, 8:00-9:40 AM at Tide Water I

MAS-4 Session: Numerical Methods I

Chair: Seungil Kim (Kyung Hee Univ) , Co-Chair: Eun-Hee Park (Kangwon National Univ)

8:00 AM	[Invited] Error analysis of a PML-FEM approximation for the Helmholtz equation in waveguides Seungil Kim (Kyung Hee Univ)
8:20 AM	Exponential Polynomial based Sharpness Indicator for Dental Tomosynthesis Imaging Yeon Ju Lee (Korea Univ)
8:40 AM	A Non-overlapping Domain Decomposition Method for Heterogeneous Elliptic Problems Eun-Hee Park (Kangwon National Univ)
9:00 AM	A Mathematical Insight into Electroporation Jane HyoJin Lee (Stonehill College)
9:20 AM	[Invited] Frequency Differential Electrical Impedance Tomography Sungwhan Kim (Hanbat Univ)

August 11 Friday, 1:20-3:20 PM at Tide Water I

MAS-5 Session: Numerical Methods II

Chair: Hyea Hyun Kim (Kyung Hee Univ), Co-Chair: Hae-Soo Oh (University of North Carolina at Charlotte)

1:20 PM	[Invited] A staggered discontinuous Galerkin method for KdV equations Hyea Hyun Kim (Kyung Hee Univ)
1:40 PM	An Optimization Based Domain Decomposition Method for Stochastic Optimal Control Problems Jangwoon Lee (Univ of Mary Washington)
2:00 PM	Unconstrained Minimization for Eigenvector Estimation Yunho Kim (Ulsan National Institute of Science and Technology)
2:20 PM	Implicitly enriched Galerkin (mapping) methods for numerical solutions of fourth order partial differential equations containing singularities Hae-Soo Oh (University of North Carolina at Charlotte)
2:40 PM	Risk Parity and Budgeting Dongsun Lee (Ulsan National Institute of Science and Technology)
3:00 PM	Primal-Dual Domain Decomposition Methods for the Total Variation Minimization with L^1 Fidelity term Chang-Ock Lee (Korea Advanced Institute of Science and Technology)