I. Conference Information

Conference rooms

Date	Event	Lecture Hall
August 24	Opening ceremony Invited talk	**Meeting room (4F, Huafu, Zhongyou Hotel)**
August 25 (Morning)	Invited talk	**Room 6 (3F, Building B, Techart Plaza, USTB)**
August 25 (Afternoon)	Invited talk	**Room 6 (3F, Building B, Techart Plaza, USTB)**
	Contributed talk	
August 25 (Afternoon)	Invited talk	**Room 5 (3F, Building B, Techart Plaza, USTB)**
	Contributed talk	
August 26	Contributed talk 1	**Room 6-1 (3F, Building B, Techart Plaza, USTB)**
August 26	Contributed talk 2	**Room 5 (3F, Building B, Techart Plaza, USTB)**
August 26	Contributed talk 3	**Room 6-2 (3F, Building B, Techart Plaza, USTB)**

Meals

Date	Event	Location
August 23	Dinner	**1F, Huafu Restaurant (Zhongyou Hotel)**
August 24	Lunch	**1F, Huafu Restaurant (Zhongyou Hotel)**
	Dinner	**1F, Huafu Restaurant (Zhongyou Hotel)**
August 25	Lunch	**1F, Huafu Restaurant (Zhongyou Hotel)**
	Banquet	**3F, Huafu Restaurant (Zhongyou Hotel)**
August 26	Lunch	**1F, Huafu Restaurant (Zhongyou Hotel)**
	Dinner	**1F, Huafu Restaurant (Zhongyou Hotel)**
August 27	Lunch	**1F, Huafu Restaurant (Zhongyou Hotel)**

II. Report Schedule

August 24: Report schedule, Meeting room (4F, Huafu, Zhongyou Hotel)		
Chair		
8:00-8:30	**Opening Ceremony**	
8:30-8:50	**Group Photo**	
Chair		
8:50-9:20	**Jing-an Cui**	Final size relation and control for epidemic model with heterogeneous mixing
9:20-9:50	**Hisashi Inaba**	The basic reproduction number R_0 in time-heterogeneous environments
9:50-10:20	**J. B. Shukla**	Global warming: its causes, control and effects
10:20-10:40	**Coffee Break**	
Chair		
10:40-11:10	**Tae-Soo Chon**	Spatial patterning and structural properties of benthic macroinvertebrate communities in responding to natural and anthropogenic variability in streams
11:10-11:40	**Wendi Wang**	Modeling HIV dynamics under combination therapy with inducers and antibodies
11:40-12:10	**Akira Sasaki**	Finding epidemiological and evolutionary hot spot in metapopulation network
Lunch (1F, Huafu Restaurant, Zhongyou Hotel)		
Chair		
14:00-14:30	**B.V. Rathish Kumar**	Cardiac electric activity in a pathological human cardiac tissue
14:30-15:00	**Young-Seuk Park**	Review and applications of ecological models in freshwater ecosystems
15:00-15:30	**Yanni Xiao**	Optimal therapy regime for HIV infection: insights from a multi-scale model
15:30-16:00	**Malay Banerjee**	Allee effect induced complex dynamics in two-prey-one-predator model
16:00-16:20	**Coffee Break**	
Chair		
16:20-16:50	**Toshiyuki Namba**	Persistence of intraguild prey in highly productive environments
16:50-17:20	**Wanho Lee**	Application of the immersed boundary method to understand physiological phenomena occurred in the human body
17:20-17:50	**Sanyi Tang**	A general model of hormesis in biological systems and its application to pest management
17:50-18:20	**Atsushi Mochizuki**	Controlling cell fate specification system based on network structure
Dinner (1F, Huafu Restaurant, Zhongyou Hotel)		

August 25 (Morning): Report schedule, Room 6 (3F, Building B, Techart Plaza)		
Chair		
8:00-8:30	**Ping Lin**	A dynamical multi-scale computational model in cancer invasion of tissue
8:30-9:00	**Kei Tokita**	Theory of species abundance distributions of evolutionary dynamics
9:00-9:30	**Hee-Dae Kwon**	Optimal control and feedback control problems of influenza models
9:30-10:00	**Balram Dubey**	Dynamics of a prey-predator system: role of fear, refuge and delay
10:00-10:20	**Coffee Break**	
Chair		
10:20-10:50	**Xinyu Song**	Dynamical analysis of a pest management Leslie–Gower model with ratio-dependent functional response
10:50-11:20	**Satoru Morita**	Sexually transmitted infection models with mother-to-child infection
11:20-11:50	**Gui-Quan Sun**	Effects of soil-water diffusion feedback regulation on vegetation patterns in semi-arid environments
Lunch (1F, Huafu Restaurant, Zhongyou Hotel)		

August 25 (Afternoon): Report schedule, Room 6 (3F, Building B, Techart Plaza)		
Chair		
14:00-14:30	**Zhenqing Li**	Modelling population persistence under habitat destruction: heterogeneity and life history adaptation
14:30-15:00	**Jitsuro Sugie**	Oscillation criteria for self-adjoint differential equations with impulsive effects
15:00-15:30	**Ram Naresh**	Role of sanitation to control the spread of carrier dependent infectious diseases: A modeling study
15:30-15:50	**Coffee Break**	
Chair		
15:50-16:20	**Meng Fan**	Dynamics of a periodic stoichiometric model with application in predicting and controlling algal bloom in Bohai Sea off China
16:20-16:50	**Sunmi Lee**	Agent-based modeling for super-spreading events: A case study of MERS-CoV transmission dynamics in the Republic of Korea
16:50-17:20	**Toshikazu Kuniya**	Stability and instability of an age-structured SIR epidemic model
17:20-17:40	**Xiulan Lai**	A stochastic model of axonal organelle accumulation induced by reduction of molecular motors
17:40-18:00	**Yukihiro Sawada**	Local stability analysis of single-species diffusion mathematical models with continuous time delays
Banquet (3F, Huafu Restaurant, Zhongyou Hotel)		

August 25(Afternoon): Report schedule, Room 5 (3F, Building B, Techart Plaza)

	Chair	
14:00-14:30	Xianning Liu	Population models with stage structures and state-dependent delays
14:30-15:00	Prashant K. Srivastava	Impact of information on treatment as well as on disease dynamics
15:00-15:30	Litao Han	Bayesian supplemental method for classifying prevalence of transmitted HIV drug resistance in low HIV prevalence regions
15:30-15:50	Coffee Break	
	Chair	
15:50-16:20	Jinbao Liao	Ecological complexity: higher-order interactions and trophic networks
16:20-16:50	Yangjin Kim	Role of tumor microenvironment in regulation of tumor progression and anti-tumor strategies
16:50-17:20	Zhigui Lin	The impact of climate warming and spatial heterogeneity on the spreading of the West Nile virus
17:20-17:40	Yoichi Enatsu	Existence of semiwave for an SI epidemic model with a free boundary
Banquet (3F, Huafu Restaurant, Zhongyou Hotel)		

August 26: Report schedule, Room 6-1 (3F, Building B, Techart Plaza)		
	Chair	
8:00-8:20	Hua Nie	Global dynamics of a reaction-diffusion system arising from intraguild predation and internal storage
8:20-8:40	Kazunori Sato	Basic reproduction number of SEIRS model on regular lattice
8:40-9:00	Jian Zu	Modeling the transmission dynamics of Hepatitis B virus in China
9:00-9:20	Shikha Singh	Modelling and analysis the effect of warming temperature on the spread of carrier dependent infectious disease
9:20-9:40	Zhihong Zhao	Traveling wave solutions of a nonlocal dispersal predator–prey model with spatiotemporal delay
9:40-10:00	Coffee Break	
10:00-10:20	Poster	
	Chair	
10:20-10:40	Jixun Chu	Controllability and stabilization of a conservation law modeling a highly re-entrant manufacturing system
10:40-11:00	Sourav Kumar Sasmal	Effect of sexual transmission in the spread of Zika virus
11:00-11:20	Xiao-Long Peng	Impact of network structure and individual behavior on epidemic dynamics
11:20-11:40	Airen Zhou	An SIR epidemic model with birth pulse and pulse vaccination on the newborn
Lunch (1F, Huafu Restaurant, Zhongyou Hotel)		
	Chair	
14:00-14:20	Yueping Dong	Exploring the dynamics of a tritrophic food chain model with multiple gestation periods

14:20-14:40	**Junho Lee**	Synergistic effects of Bortezomib-OV therapy and anti-invasive strategies in glioblastoma: a mathematical model
14:40-15:00	**Yan Yan**	Existence and global asymptotic stability for a discrete hematopoiesis model with unimodal production functions
15:00-15:20	**Coffee Break**	
Chair		
15:20-15:40	**Kento Okuwa**	Mathematical analysis for an age-structured SIRS epidemic model
15:40-16:00	**Zhe Yin**	Stability analysis of an age-structured SEIRS epidemic model with time delay
16:00-16:20	**Yu Tsubouchi**	Calculation of final size for vector-transmitted epidemic model
Dinner (1F, Huafu Restaurant, Zhongyou Hotel)		

August 26: Report schedule, Room 5 (3F, Building B, Techart Plaza)		
Chair		
8:00-8:20	**Ling Xue**	Transmission dynamics of multi-strain dengue virus with cross-immunity
8:20-8:40	**Toru Sasaki**	Stability of equilibria of pathogen-immune models
8:40-9:00	**Qiming Liu**	Global dynamics analysis of an SEIR epidemic model with discrete delay on complex network
9:00-9:20	**Hui Wan**	The threshold infection level for Wolbachia invasion in a two-sex mosquito population model
9:20-9:40	**Donggu Lee**	Role of tumor-associated neutrophils and NE in regulation of lung cancer growth and growth patterns
9:40-10:00	**Coffee Break**	
10:00-10:20	**Poster**	
Chair		
10:20-10:40	**Satoshi Takahashi**	Oscillation of laterality in prey-predator system with time delay, due to predation or frequency dependence?
10:40-11:00	**Dan Li**	Threshold dynamics and ergodicity of an SIRS epidemic model with semi-Markov switching
11:00-11:20	**Sungchan Kim**	The effectiveness of controlling relapse in Plasmodium vivax malaria in the temperate regions: a mathematical modeling analysis
11:20-11:40	**Songbai Guo**	Global dynamics of a time-delayed microorganism flocculation model
Lunch (1F, Huafu Restaurant, Zhongyou Hotel)		
Chair		
14:00-14:20	**Maki Ishitani**	Mathematical model for dispersal strategy of wolves
14:20-14:40	**Ke Guo**	Global stability of a differential equation model of Kawasaki disease pathogenesis
14:40-15:00	**Karan Ota**	Estimation of the dispersal kernel of the beetle that vectors pine wilt disease as a point pattern dynamics
15:00-15:20	**Coffee Break**	

Chair		
15:20-15:40	Zhenzhen Lu	Stability analysis for an SIR epidemic model with reaction-diffusion
15:40-16:00	Shanshan Yan	The study of stochastic predator-prey system with time delay for C-M type functional responses
16:00-16:20	Guodong Liu	Optimal harvesting strategy for a stochastic mutualism system in a polluted environment with regime switching
Dinner (1F, Huafu Restaurant, Zhongyou Hotel)		

August 26: Report schedule, Room 6-2 (3F, Building B, Techart Plaza)		
Chair		
8:00-8:20	Jianjun Jiao	Threshold dynamics of a stage-structured single population model with non-transient and transient impulsive effects
8:20-8:40	Zhihang Peng	Opportunities and challenges of large data research on EPI for infectious diseases
8:40-9:00	Maya Kageyama	Climate regulation and spatial segregation patterns in Daisyworld
9:00-9:20	Qianliang Wang	Tradeoffs among RNA nuclear retention and nuclear RNA export optimize gene expression noise
9:20-9:40	Tomoei Takahashi	Protein design using Bayesian learning
9:40-10:00	**Coffee Break**	
10:00-10:20	**Poster**	
Chair		
10:20-10:40	Takashi Okada	Emergent bias in population models with broad offspring number distributions
10:40-11:00	Nuo Xu	Spatial driver of instability in marine size-spectrum ecosystem
11:00-11:20	Shojiro Abe	Domain theoretical approach to boolean networks
11:20-11:40	Taishu Murakami	Evolution of in-group favoritism and game theoretical analysis
Lunch (1F, Huafu Restaurant, Zhongyou Hotel)		

August 26: Poster schedule, 3F, Building B, Techart Plaza		
10:00-10:20	Yong Dam Jeong	Optimal harvesting strategies for hairtail, Trichiurus Lepturus in Korea using age-structured model with density dependence and environmental effect
	Soyeon Kim	Parameter estimation for system biology
	Sieun Lee	Role of miR-378 and Nrf1 in regulation of NASH