

Schedule of International Conference on Applied Math and Computational Neuroscience

Conference Venue:

601 Pao Yue-Kong Library, Minhang Campus, Shanghai Jiao Tong University

Day 1: July 23, 2018

Check in: Manhattan Hotel	
4:00-6:00pm	Registration (at Manhattan Hotel)
5:50pm	Meeting at the lobby of Manhattan Hotel, to Harvest Day Restaurant
6:10-8:30pm	Dinner (Harvest Day Restaurant, 5 minutes' walking distance from Manhattan Hotel)
Location	4 th Floor Building No.2, Bi Jiang Plaza, No.900 He Qing Road
Features	Enjoy Hangzhou cuisine

Day 2, July 24, 2018

8:00am	Meeting at the lobby of Manhattan Hotel Shuttle Bus from Manhattan Hotel to SJTU	
8:15-8:40am	Registration: 601 Pao Yue-Kong Library, Minhang Campus, SJTU	
08:40-09:00am	Opening Remarks : Xuemin Xu, Weinan E, Shi Jin	
Morning Session: Chaired by Shi Jin		
09:00-09:40am	Large-scale Computational Model of Mouse V1	David McLaughlin
09:40-10:20am	Machine Learning and Multi-scale Modeling	Weinan E
10:20-10:40am	Coffee Break	
10:40-11:20am	Magnetic Stabilizing Effects on the Rayleigh-Taylor Instability in Non-resistive Magneto Hydrodynamics	Song Jiang
11:20am-12:00pm	Inverse Source Scattering in Wave Propagation	Gang Bao
12:10pm	Group Photo Location: main gate of the Pao Yue-Kong Library, SJTU	
Lunch (No. 2 Cafeteria)		

12:15pm	Shuttle Bus from Pao Yue-Kong Library to No. 2 Cafeteria, SJTU	
1:30pm	Shuttle Bus from No. 2 Cafeteria to Pao Yue-Kong Library, SJTU	
Afternoon Session: Chaired by Song Jiang		
2:00-2:40pm	Fom Voltage-conductance Kinetic Models to Integrate & Fire Equation for Neural Assemblies	Benoit Perthame
2:40-3:20pm	A Coarse-graining Framework for Spiking Neuronal Networks: From Strongly-Coupled Integrate-and-Fire Neurons to Augmented Systems of ODEs	Louis Tao
3:20-3:40pm	Coffee Break	
3:40-4:20pm	Hydrodynamic Models and Boundary Confinement Effects	Roberto Camassa
4:20-5:00pm	Topics in Diffusion: Boundaries and Temperature	Chun Liu
Dinner (Campus Café)		
5:15pm	Shuttle Bus from Pao Yue-Kong Library, SJTU to Campus Café	
7:30pm	Shuttle Bus from Campus Café to Manhattan Hotel	

Day 3, July 25, 2018

8:15am	Meeting at the lobby of Manhattan Hotel Shuttle Bus from Manhattan Hotel to SJTU	
Morning Session: Chaired by Weike Wang		
9:00-9:40am	Exact Boundary Controllability of Nodal Profile for Saint-venant System on a Network with Loops	Tatsien Li
9:40-10:20am	The Coupling and Decoupling of Free Flow and Porous Media Flow	Xiaoming Wang
10:20-10:40am	Coffee Break	
10:40-11:20am	Continuum Modeling of Transportation Networks with Partial Differential Equations	Peter Markowich
11:20am-12:00pm	A Fast Hierarchical Algorithm for Computing High Dimensional Truncated Multivariate Gaussian Probabilities and Expectations	Jingfang Huang

Lunch (No. 2 Cafeteria)		
12:15pm	Shuttle Bus from Pao Yue-Kong Library, SJTU to No. 2 Cafeteria	
1:30pm	Shuttle Bus from No. 2 Cafeteria to Pao Yue-Kong Library, SJTU	
Afternoon Session: Chaired by Douglas Zhou		
2:00-2:40pm	Neuronal Learning - From Synapse to Network	Guoqiang Bi
2:40-3:20pm	Push-pull Feedback Implements Hierarchical Associative Memory	Si Wu
3:20-3:40pm Coffee Break		
3:40-4:20pm	Emergent Orientation Selectivity from Random Networks in Mouse Visual Cortex: Mice Are Not Cats - An (almost) Exact Proof	David Hansel
4:20-5:00pm	Synchrony and Information Flow in Integrate-and-Fire Neuronal Network Models	Katie Newhall
Banquet (Ya Ke Restaurant)		
We will share memories of David Cai.		
5:15pm	Shuttle Bus: From Pao Yue-Kong Library, SJTU to Ya Ke Restaurant	
9:00pm	Shuttle Bus: From Ya Ke Restaurant to Manhattan Hotel	
Location	3rd Floor, 248 West Nanjing Road	
	One hour drive from Minhang, Shanghai Jiao Tong University	
Features	Enjoy Shanghai local dish at downtown roof garden	

Day 3, July 26, 2018

8:15am	Meeting at the lobby of Manhattan Hotel Shuttle Bus from Manhattan Hotel to SJTU	
Morning Session: Chaired by Dan Hu		
09:00-09:40am	Peer Into Your Brain Via Contiguous Scale Data	Jianfeng Feng
09:40-10:20am	Conditional Density Estimation Through Optimal Transport	Estaban Tabak
10:20-10:40am Coffee Break		
10:40-11:20am	Circuitry Mechanisms for Associative Learning and Cortical Activity Oscillation	Xiaohui Zhang

11:20am-12:00pm	Reconstruction of Sparse Connectivity in Neuronal Networks Using Compressive Sensing of Network Dynamics	Victor Barranca
Lunch (No. 2 Cafeteria)		
12:15pm	Shuttle Bus from Pao Yue-Kong Library, SJTU to No. 2 Cafeteria	
1:30pm	Shuttle Bus from No. 2 Cafeteria to Pao Yue-Kong Library, SJTU	
Afternoon Session 1: Chaired by David McLaughlin		
2:00-2:40pm	Neural Information Coding in The Amygdala And Hippocampus	Longnian Lin
2:40-3:20pm	Relationship Between Cross-region Correlation in Firing and Neuronal Response to Behavioral Events	Chengyu Li
3:20-3:40pm	Coffee Break	
Dinner (Corner Restaurant)		
4:30pm	Shuttle Bus from Pao Yue-Kong Library, SJTU to Corner Restaurant	
8:30pm	Shuttle Bus from Corner Restaurant to Manhattan Hotel	
Location	2nd Floor, Ruijin No.1 Road	
	One hour drive from Minhang, Shanghai Jiao Tong University	
Features	Enjoy Shanghai cuisine at Shikumen-style restaurant	