

Tutorials: Neuroscience and AI (A204, New Chemistry Building, PKU, July 2-3, 2018)

(50 min. lecture + 10 min. break)	July 2 nd : Computational Neuroscience	July 3 rd : Artificial Neural Network based AI
9:00am – 10:00am	Brief introduction to experimental neuroscience Donggen Luo	Artificial neural network: some historic notes Yuhai Tu
10:00am – 11:00am	Computational neuroscience: from molecules to circuits – part I Roger Traub	Introduction to deep learning neural network (DLNN) – part I Mattia Rigotti
11:00 am – 12:00 pm	Computational neuroscience: from molecules to circuits – part II Roger Traub	Introduction to deep learning neural network (DLNN) – part II Mattia Rigotti
12:00pm – 1:30pm	LUNCH	LUNCH
1:30pm – 2:30pm	Computational neuroscience: from molecules to circuits – part III Roger Traub	Recent developments of DLNN – part I Surya Ganguli
2:30pm – 3:30pm	Coarse-grained models and statistical physics approach – part I Louis Tao	Recent developments of DLNN – part II Surya Ganguli
3:30pm – 4:30pm	Coarse-grained models and statistical physics approach – part II Louis Tao	Student presentations TBD (we need to work on this)

Schedule for “Neuroscience and AI”

(101 Lecture Hall, Jinguang Life Sciences Building, PKU, July 4-6, 2018)

July 4 th (AM) 8:30am-9:00am Opening remarks by Chao Tang (CQB) and Fang Fang (McGovern) Chair: Donggen Luo & Yuhai Tu	July 5 th (AM) Session III: Vision Chair: François Rouyer	July 6 th (AM) Session V: Memory Chair: Glenn Turner
Session I: Neural computation Chair: Yuhai Tu	8:30 am--9:20 am Michael Reiser	8:30 am--9:20 am Misha Tsodyks
9:00 am– 9:50 am Roger Traub	9:20 am – 10:10 am Charles Stevens	9:20 am – 10:10 am Guoqiang Bi
9:50 am– 10:30 am Tea Break & Taking Picture	10:10 am – 10:30 am Tea Break	10:10 am – 10:30 am Tea Break
10:30 am – 11:20 am Dmitri Chklovskii	10:30 am – 11:20 am Tatyana Sharpee	10:30 am – 11:20 am Xiaohui Zhang
11:20 am – 12:10 am Surya Ganguli	11:20 am – 12:10 am Liangyi Chen	11:20 am – 12:10 am Yousheng Shu
12:10 PM – 1:30 PM LUNCH	12:10 PM – 1:30 PM LUNCH	12:10 PM -- 1:30 PM LUNCH
July 4 th (PM) Session II: Olfaction/Audition Chair: Charles Stevens	July 5 th (PM) Session IV: Clock/Sleep Chair: Michael Reiser	July 6 th (PM) Session VI: Decision Chair: Yousheng Shu
1:30 pm – 2:20 pm Glenn Turner	1:30 pm – 2:20 pm Ravi Allada	1:30 pm – 2:20 pm Lusha Zhu
2:20 pm – 3:10 pm Aravinthan Samuel	2:20 pm – 3:10 pm Paul Shaw	2:20 pm – 3:10 pm Mattia Rigotti
3:10 pm – 3:30 pm Tea Break	3:10 pm – 3:30 pm Tea Break	3:10 pm – 3:30 pm Tea Break
3:30 pm – 4:20 pm Xiaoqin Wang	3:30 pm-- 4:20 pm François Rouyer	3:30 pm-- 4:20 pm Ilya Nemenman
4:20 pm – 5:10 pm Yuhai Tu	4:20 pm – 5:10 pm Donggen Luo	4:20 pm – 5:10 pm Gero Miesenböck