

NEURON presentations at the SFN 2016 meeting

identified as of 11/14/2016

Please contact ted.carnevale@yale.edu if you know of something that should be added, or see something that should be omitted.

#	Poster	Presentation	Title	Author1
11/12/2016 PM				
1	LLL16	96.16	Neurogpu, a gpu framework for neuron-based simulation	Ben-Shalom
11/13/2016 AM				
	III33	178.16	A computational model of ACC neuron outcome prediction responses	Bedoy
11/13/2016 PM				
2	III28	263.14	The role of hippocampal replay in a computational model of path learning	Ragone
3	L6	221.17	Interaction of AMPA and NMDA conductances in transducing synaptic drive into action potential output	Li
4	L9	221.2	Voltage-imaging of electrical signaling in dendritic spines.	Weng
5	K11	221.05	Spine neck morphology shapes postsynaptic potentials in hippocampal neurons	Tonnesen
6	III22	263.08	Degenerate mechanisms mediate decorrelation and pattern separation in the dentate gyrus	MISHRA
11/14/2016 AM				
7	NNN17	368.01	Consequences of sparse activity in the ento-dentate-CA3 pathway: Investigations using a large-scale, biologically realistic, computational model of the hippocampus	Yu
8	E15	300.11	An automatic pipeline to optimize subcellular models of transynaptic signaling at inhibitory synapses	Migliore
9	K1	310.16	Initiation and propagation of action potentials in the hyperdirect pathway during subthalamic deep brain stimulation	Anderson
10	NNN34	368.18	Tms-induced neuronal activation - a computational study	Seo
11	NNN18	368.02	Simulated effects of acetylcholinesterase inhibitors on hippocampal cell network activity	Mergenthal
12	NNN40	368.24	PyPN - a tool for simulating peripheral nerves	Lubba
13	NNN19	368.03	A model of axonal branching for medium and long range fibers in a multi-scale model of hippocampal tissue	Bingham
14	NNN21	368.05	A closed-loop multi-scale simulation paradigm for accurate modeling of electrical stimulation in hippocampus	Hendrickson
15	NNN24	368.08	Impact of dendritic morphology on functional subunits in dendrites	Hong
16	OO12	334.08	Computational capacity as a function of network size	Kerr
11/14/2016 PM				
17	H15	404.11	Dendritic morphology of corticospinal and crossed-corticostriatal neurons in mouse primary motor cortex	Suter
18	H16	404.12	Schizophrenia as a disorder of cellular excitability: Insights from computational models of cortical neurons and cardiac pacemaker cells	Mäki-Marttunen
19	NN6	429.13	Mechanisms of sensory inhibition induced by neocortical beta rhythms	Law
20	LLL27	462.13	Small conduction delays induce global synchrony in sparsely but strongly connected inhibitory networks.	Canavier
21	LLL28	462.14	Mechanisms of spike timing in a detailed computer model of a medial entorhinal cortical stellate cell	Bezaire

22	NNN22	469.07	Biophysical modeling of single-neuron contributions to EEG and ECoG signals	Naess
23	H20	404.16	Role of synaptic amplification in spatial selectivity in a biophysical model of the CA1 microcircuit	Milstein
24	PP4	430.26	Middle tufted cell drive the mitral cell spatiotemporal firing patterns through glomerular and granule cell microcircuits	Cavarretta
25	SDCC 32B	381.04	Regulation of motoneuron excitability in ALS	ElBasiouny
26	G4	401.06	Anti-Hebbian learning of optimal homeostatic IPSP amplitude and decay time	Kim
27	NN13	430.07	Dynamic regulation of mitral cell spike synchronization and phase-locking by external tufted cells in a glomerular network model	Rapp
28	H12	404.08	Dendritic spikes determine input selectivity in pyramidal cells	Goetz

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29	O18	507.15	Beta oscillations in neocortex: A multiscale modeling study	Neymotin
30	TT7	526.16	Automated point-neuron simplification of data-driven microcircuit models	Rössert
31	EEE5	537.16	A computational motor neuron pool model for the development of motor decoder algorithms for prosthetic control	Allen
32	TT9	526.18	Multi-level brain region reconstruction and simulation on supercomputers: Enhancements for performance, scalability, and usability.	King
33	DD14	517.03	Mosaic multiscale computer modeling of ischemic stroke	Seidenstein
34	SS21	526.04	BluePyOpt: Leveraging Python and the cloud to optimise models to neuroscience data	Courcol
35	SS22	526.05	Unique membrane and enhanced computations in human neocortical neurons	Eyal
36	BBB11	534.06	Modeling the subcellular distribution of synaptic connections in cortical microcircuits	Dura-Bernal
37	SS26	526.09	A data-driven computational model of relay cells of the ventral posterolateral nucleus of the thalamus	Iavarone
38	SDCC 6F	473.03	Precise spike timing in the cerebellum influences eye movements in mice	Raymond

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39	F53	590.18	Serotonergic modulation of fast-spiking interneurons in medial prefrontal cortex	Athilingam
40	V3	602.3	Cortical evoked potentials generated by deep brain stimulation	Kumaravelu
41	AAA10	628.08	Non-reciprocal effects of KCNQ/Kv7 channel modulation on the excitability of spinal motoneurons in mouse neonates	Lombardo

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42	E19	680.01	Autism-associated missense mutations in SCN2A impair Na ^V 1.2 sodium channel function	Ben-Shalom
43	MMM53	753.11	A depolarization-activated increase in voltage-dependent potassium currents in response to elevated temperature may account for action potential block in models of the squid giant axon.	Ganguly
44	NNN37	755.12	Recent advances in ModelDB	Morse
45	RR20	719.19	Large-scale realistic modeling reveals spatiotemporal dynamics of cerebellar granular layer responses to mossy fiber bursts	Casali
46	QQ18	718.2	The fine temporal structure of neural spike trains impacts motor behavior	Payne

47	NNN32	755.07	Performance driven neural network model representation: a relational approach	Gratiy
48	H20	687.08	Identifying the passive membrane properties of myelinated axons	Cohen
11/16/2016 PM				
49	LLL26	844.15	Schizophrenia genome-wide association studied with computer simulation: gamma oscillations and information flow in CA3	Sherif
50	J1	787.25	Splice-variant and isoform-dependent isradipine-inhibition of recombinant L-type Ca^{2+} currents evoked by substantia nigra dopamine neuron-like activity patterns	Ortner
51	JJJ21	838.06	Reconstruction and simulation of the hippocampus in the human brain project	Romani
52	NNN19	849.07	Expanding NEURON support for reaction-diffusion models	McDougal