

| <b>Title</b>  | <b>First Name<br/>(Corr. Author)</b> | <b>Last Name<br/>(Corr. Author)</b> | <b>Email</b>                                |
|---|--------------------------------------|-------------------------------------|---|
| On the Functional Role of Noise Correlations in the Nervous System  | Stefan D.                            | Wilke                               | swilke@physik.uni-bremen.de                 |
| Morphometric Modeling of Olfactory Neurons in the Insect Brain  | Giampaolo                            | D'Alessandro                        | G.D'Alessandro@maths.soton.ac.uk            |
| Rank Order Decoding of Temporal Parallel Fibre Input Patterns in a Complex Purkinje Cell Model                    | Volker                               | Steuber                             | volker@bbf.uia.ac.be                        |
| A model of hippocampal circuitry mediating goal-driven navigation in a familiar environment                       | Anatoli                              | Gorchetchnikov                      | anatoli@cns.bu.edu                          |
| Short-term plasticity shapes normal and Parkinsonian activity patterns in the globus pallidus                     | Dieter                               | Jaeger                              | djaeger@emory.edu                           |
| A NEW MODEL FOR Ca <sup>+2</sup> WAVES IN ASTROCYTES: GLUTAMATE INDUCED GLUTAMATE RELEASE                         | Raima                                | Larter                              | larter@chem.iupui.edu                       |
| A General Framework for Neurobiological Modeling: An Application to the Vestibular System                         | Chris                                | Eliasmith                           | eliasmith@uwaterloo.ca                      |
| Mechanistic Modeling of the Retinogeniculate Circuit in Cat   | Hans E.                              | Plessner                            | hans.plessner@itf.nlh.no                    |
| The Role of Muscle Spindles in Constraining Motor Control - A Simulation Study                                    | Bjorn G.                             | Nielsen                             | bjorn.nielsen@fysik.dtu.dk                  |
| AN ALTERNATIVE APPROACH TO INFOMAX AND INDEPENDENT COMPONENT ANALYSIS   | Aapo                                 | Hyvarinen                           | Aapo.Hyvarinen@hut.fi                       |
| Dynamic routing of action potentials  | Adam                                 | Kepecs                              | kepecs@brandeis.edu                         |
| Dynamic adaptation to statistics in a neural code   | Adrienne                             | Fairhall                            | adrienne@research.nj.nec.com                |
| The structural basis of information transfer from medial temporal lobe to prefrontal cortex in the macaque monkey | Rolf                                 | Kotter                              | rk@hirn.uni-duesseldorf.de                  |
| Problem-solving Behavior in a System Model of the Primate Neocortex   | Alan H.                              | Bond                                | bond@vision.caltech.edu                     |
| Modulation of visual cortical neurons by selective spatial attention in a recurrent network model                 | Albert                               | Compte                              | acompte@brandeis.edu                        |
| Formation of pinwheels of preferred orientation by learning sparse neural representations of natural images       | Albert                               | Mouksovski                          | mukovski@neuroinformatik.ruhr-uni-bochum.de |
| Spike pattern-based coding schemes in the cricket cercal sensory system   | Alexander G.                         | Dimitrov                            | alex@cns.montana.edu                        |
| LARGE-SCALE MODELS OF THE LOCOMOTOR SPINAL NETWORK OF LAMPREY   | Alexander                            | Kozlov                              | akozlov@nada.kth.se                         |

|  |            |                 |                                 |
|--|------------|-----------------|---------------------------------|
| Correlated Poisson Spike Trains and their Effects on the Response of the Integrate-and-Fire Neuron                                     | Alexandre  | Kuhn            | kuhn@biologie.uni-freiburg.de   |
| Hippocampal Cognitive Maps: An Alternative View  | Alexei     | Samsonovich     | asamsono@gmu.edu                |
| MEAN FIRING RATE AND CV OF A LIF NEURON WITH EXPONENTIALLY CORRELATED INPUT  | Ruben      | Moreno          | rmoreno@delta.ft.uam.es         |
| Adaptation and post-inhibitory Rebound shape responses in a model of dynamic conditioning in the auditory midbrain                     | Alla       | Borisyuk        | borisyuk@cims.nyu.edu           |
| RECURRENT GLOBAL DYNAMICS UNDERLIE PERCEPTUAL GROUPING   | Allan      | Dobbins         | adobbins@uab.edu                |
| Perceptual Geometry of Space and Form: Visual Perception of Scenes And Places  | Amir       | Assadi          | ahassadi@facstaff.wisc.edu      |
| Nonstationary PCA For Network Feature Extraction In Multielectrode Recording Of Neuropsychological Data In Cortical Substrates Of Pain | Dian       | Fallahati       | dmfallahati@students.wisc.edu   |
| Nonlinear features in MEG and functional MRI data of human brain   | Amir H.    | Assadi          | assadi@math.wisc.edu            |
| Nonlinear Dynamics and Motion In Human Face Image Space  | Amir H.    | Assadi          | ahassadi@facstaff.wisc.edu      |
| CLIMBING FIBERS AS CLOCKS - NOT ERROR DETECTORS: A NEW MODEL OF CEREBELLAR LEARNING  | Thomas J.  | Anastasio       | tja@uiuc.edu                    |
| Reinstatement and memory consolidation in interacting attractor networks with fast and slow learning dynamics                          | Anders     | Sandberg        | asa@nada.kth.se                 |
| Functional imaging and neuronal information processing   | Angel      | Nevado          | anevado@delta.ft.uam.es         |
| SIMULATIONS OF SPACE-CLAMP ERRORS IN ESTIMATING PARAMETERS OF VOLTAGE-GATED CONDUCTANCES LOCALIZED AT DIFFERENT ELECTROTONIC DISTANCES | Ann M.     | Castelfranco    | castelf@pbrc.hawaii.edu         |
| Limitations of Spectral-Temporal Receptive Field Predictions By Neural Noise   | Anne       | Hsu             | showen@uclink4.berkeley.edu     |
| The onset response of a balanced leaky integrate-and-fire neuron with reversal potentials  | Anthony N. | Burkitt         | a.burkitt@medoto.unimelb.edu.au |
| An information-theoretic analysis of the coding of a periodic synaptic input by integrate-and-fire neurons                             | Anthony N. | Burkitt         | a.burkitt@medoto.unimelb.edu.au |
| SIMULATION OF A VERTEBRATE RECEPTOR CELL OF THE OLFACTORY EPITHELIUM FOR USE IN NETWORK MODELS   | Fábio M.   | Simões-de-Souza | fabioms@neuron.ffclrp.usp.br    |

|  |              |               |   |
|--|--------------|---------------|---|
| A BIOLOGICALLY PLAUSIBLE NEURAL NETWORK MODEL OF THE PRIMATE PRIMARY VISUAL SYSTEM   | Rodrigo F.   | Oliveira      | rodrigo@neuron.ffclrp.usp.br                      |
| From single-trial ERPs to brain area dynamics: Sequential activations during rapid categorization of natural images        | A.           | Delorme       | arno@salk.edu                                     |
| SIMULATION OF SACCADIC EYE MOVEMENTS USING A POPULATION OF BIOLOGICAL NEURONS  | Ashoka D.    | Polpitiya     | adpol@zach.wustl.edu                              |
| A minimal model of the auditory periphery explains the timing and precision of the auditory first-spike                    | Suresh       | Krishna       | suresh@cns.nyu.edu                                |
| CALCIUM AND FACILITATION IN NERVE TERMINALS:A MONTE CARLO INVESTIGATION INCORPORATING A CALCIUM-BINDING FACILITATION SITE  | William G.   | Gibson        | billg@maths.usyd.edu.au                           |
| Modeling Place Cell Firing: Phase Precession and the Firing Rate Code  | Victoria     | Booth         | vbooth@m.njit.edu                                 |
| BRAIN TISSUE SCANNER ENABLES BRAIN MICROSTRUCTURE SURVEYS  | Bruce        | McCormick     | mccormick@cs.tamu.edu                             |
| Sparse codes and spikes  | Bruno A.     | Olshausen     | baolshausen@ucdavis.edu                           |
| Retrieval dynamics in 'many-columns' neocortical models  | Carlo        | Fulvi Mari    | C.Fulvi-Mari@ulg.ac.be                            |
| GHOSTBURSTING: A NOVEL BURSTING MECHANISM IN PYRAMIDAL CELLS   | Carlo        | Laing         | claing@science.uottawa.ca                         |
| The role of mid-dorsolateral prefrontal cortex in working memory: a connectionist model                                    | Carter       | Wendelken     | carterw@icsi.berkeley.edu                         |
| Dynamics of the Synfire Chain:Intrinsic and Interacting Properties of Pulse Packets Revealed by the Fokker-Planck Equation | Hideyuki     | Câteau        | cateau@brain.inf.eng.tamagawa.ac.jp,              |
| MUTUAL INFORMATION CALCULATION USING EMPIRICAL CLASSIFICATION  | Charlotte M. | Gruner        | cmgruner@vcn.com                                  |
| ON THE VARIABILITY OF THE INTEGRATE-AND-FIRE NEURONS WITH PARTIAL RESET IN THE PRESENCE OF INHIBITION                      | Chris        | Christodoulou | chris@dc.s.bbk.ac.uk                              |
| EVOLVING FIELD MODELS FOR INHIBITION EFFECTS IN EARLY VISION   | Christian    | Igel          | christian.igel@neuroinformatik.ruhr-uni-bochum.de |
| How synchrony among antennal lobe neurons affects odor discrimination  | Thomas A.    | Cleland       | tac29@cornell.edu                                 |
| Recognizing the gist of a visual scene: possible perceptual and neural mechanisms  | Christoph    | Rasche        | rasche@klab.caltech.edu                           |
| Cyclic Feed-forward Associative Memory Networks and their Relevance to the Hippocampus                                     | Kit          | Longden       | kit@anc.ed.ac.uk                                  |

|  |               |                 |                              |
|--|---------------|-----------------|------------------------------|
| Classes and gradients of prefrontal cortical organization in the primate   | C.C.          | Hilgetag        | claus@bu.edu;                |
| EXTENDED HODGKIN HUXLEY TYPE MODEL FOR ACTION POTENTIAL FIRING AND PROPAGATION IN NRK FIBROBLAST CULTURES                      | L. Niels      | Cornelisse      | cornelis@sci.kun.nl          |
| How much information is encoded about a particular stimulus?   | Daniel A.     | Butts           | dbutts@hms.harvard.edu       |
| A MODEL OF LIMBED LOCOMOTION FOR A FOUR MUSCLE SYSTEM  | David         | Boothe          | boothe@glue.umd.edu          |
| BIPERIODIC STOCHASTIC OSCILLATIONS IN PADDLEFISH ELECTRORECEPTORS  | David F.      | Russell         | drussell@admiral.umsl.edu    |
| Object recognition and clustering in a coupled chaotic oscillator network with modulated synchronization                       | David         | DeMaris         | demaris@ece.utexas.edu       |
| A Spike Train Analysis for Quantifying Inhibitory Near-Synchrony in Spike Firings  | David C.      | Tam             | dtam@unt.edu                 |
| Synaptic Depression and Facilitation Can Induce Motion Aftereffects in an Excitable Membrane Model of Visual Motion Processing | Davis         | Barch           | dbarch@uclink4.berkeley.edu  |
| Slowly Moving Stimuli Induce Characteristic Periodic Activity Waves in an Excitable Membrane Model of Visual Motion Processing | Davis         | Barch           | dbarch@uclink4.berkeley.edu  |
| When Mind Meets Brain: Effects of Eye Movements on the Flow of Information During Free-Viewing Natural Time-Varying Images     | Dawei W.      | Dong            | dawei@dove.ccs.fau.edu       |
| NOISY CODING AND OSCILLATIONS REGULATE SYNAPTIC GAIN IN SYMPATHETIC GANGLIA  | Diek W.       | Wheeler         | diek@pitt.edu                |
| Modeling Visual Search Experiments: The Selective Attention for Identification Model (SAIM)                                    | Dietmar       | Heinke          | d.g.heinke@bham.ac.uk        |
| Effects of short-time synaptic plasticity on the associative memory  | Dmitri        | Bibitchkov      | dmitri@chaos.gwdg.de         |
| OPTIMAL STIMULUS CODING BY POPULATIONS   | Don H.        | Johnson         | dhj@rice.edu                 |
| Ideal Observer of Single Neuron Activity   | Jianfeng      | Feng            | jf218@cam.ac.uk              |
| A Neural Ensemble Model of the Respiratory Central Pattern Generator: Properties of the Minimal Model                          | Witali L.     | Dunin-Barkowski | phywdb@physiology.ttuhsc.edu |
| Analysis of Output of All Purkinje Cells, Controlled by One Climbing Fiber Cell  | Witali L.     | Dunin-Barkowski | phywdb@physiology.ttuhsc.edu |
| FEED-FORWARD INHIBITION IN THE VISUAL THALAMUS   | Efstathios K. | Kosmidis        | kosmidis@u444.jussieu.fr     |
| ON FORWARD KINEMATICS MODELS FOR VISUALLY GUIDED HAND POSITION CONTROL   | Eimei         | Oyama           | eimei@mel.go.jp              |

|  |            |            |   |
|--|------------|------------|---|
| Chaotic grounded learning in large recurrent networks  | Emmanuel   | DAUCE      | dauce@cert.fr                                 |
| Elucidating Sources of Modulation for Behaviorally-Mediated Tactile Response Characteristics                       | Erika E.   | Fanselow   | efanse@neuro.duke.edu                         |
| EXPLORING A ROLE FOR CA1   | Evan       | Haskell    | haskell@sissa.it                              |
| Self-oscillatory dynamics in recurrent excitatory networks   | Fabian     | Alvarez    | fapa@fcien.edu.uy                             |
| Channel Noise In A Reconstructed Multi-Compartmental Hodgkin-Huxley Model  | J-M.       | Fellous    | fellous@salk.edu                              |
| SLOWLY-INACTIVATING POTASSIUM CONDUCTANCES IN A SIMPLE COMPARTMENTAL INTERNEURON MODEL                             | Fernanda   | Saraga     | fernanda.saraga@utoronto.ca                   |
| Stochastic resonance in visual cortical neurons: Does the eye-tremor actually improve visual acuity?               | Nicolas    | Kerscher   | kerscher@neurop.ruhr-uni-bochum.de            |
| GAIN MODULATION THROUGH BALANCED SYNAPTIC INPUT  | Frances S. | Chance     | chance@cns.nyu.edu                            |
| Scaling a slow wave sleep cortical network model using NEOSIM  | F.         | Howell     | fwh@anc.ed.ac.uk                              |
| IS VOLTAGE DEPENDENT SYNAPTIC TRANSMISSION IN NMDA RECEPTORS A ROBUST MECHANISM FOR WORKING MEMORY?                | Andreas    | Knoblauch  | andreas.knoblauch@neuro.informatik.uni-ulm.de |
| OPTIMAL SPONTANEOUS ACTIVITY IN NEURAL NETWORK MODELING  | Daniel     | Remondini  | remondin@bofi79.df.unibo.it                   |
| Memory Consolidation through Synaptic Reentry Reinforcement and Weight Decay                                       | Gayle M.   | Wittenberg | gaylew@princeton.edu                          |
| A Simulator for the Analysis of Neuronal Ensemble Activity: Application to Reaching Tasks                          | George S.  | Hugh       | hughgs@duke.edu                               |
| BURSTING IN LEECH HEART INTERNEURONS: CELL AUTONOMOUS AND NETWORK BASED MECHANISMS                                 | Gennady S. | Cymbalyuk  | gcym@biology.emory.edu                        |
| Discharge rate of neocortical pyramidal cells in response to noisy input currents                                  | Alexander  | Rauch      | rauch@pyl.unibe.ch                            |
| Adjusting stochastic resonance in a leaky integrate and fire neuron to sub-threshold stimulus distributions        | Gregor     | Wenning    | grewe@cs.tu-berlin.de                         |
| Converging Evidence for a General Form of Synaptic Plasticity: Synaptic Dynamics and Comparison to Abstract Rules. | Harel Z.   | Shouval    | hzs@cns.brown.edu                             |
| A structure preserving image transformation as the goal of visual sensory coding                                   | Hauke      | Bartsch    | hauke@cs.tu-berlin.de                         |
| PHASE-LOCKED OSCILLATIONS IN A NEURONAL NETWORK MODEL  | H.         | Nagashino  | nagasino@ee.tokushima-u.ac.jp                 |

|   |           |                    |   |
|---|-----------|--------------------|---|
| PHYSIOLOGICAL MODELLING OF A POSSIBLE NEURAL MECHANISM FOR COGNITIVE TIMING   | Hiroshi   | Okamoto            | hiroshi.okamoto@fujixerox.co.jp               |
| ROLE OF INFRASLOW (0 - 0.5 HZ) POTENTIALS OSCILLATIONS IN THE REGULATION OF BRAIN STRESS RESPONSE BY THE LOCUS COERULEUS SYSTEM | Igor V.   | Filippov           | filippov@yma.ac.ru                            |
| Neural mechanisms for respiratory rhythm generation: state dependency and switching   | Ilya A.   | Rybak              | rybak@cbis.ece.drexel.edu                     |
| THETA FREQUENCY LOCKING BY SLOW GABA (A) SYNAPTIC INHIBITION IN A HIPPOCAMPAL SLM INTERNEURONAL NETWORK MODEL                   | Isao      | Yamaguchi          | isao.yamaguchi@fujixerox.co.jp                |
| VISUALIZING PLASTIC CHANGE IN A LARGE MODEL OF SOMATOSENSORY CORTEX USING AN ADAPTIVE COORDINATES ALGORITHM                     | Jackson   | Beatty             | beatty@ucla.edu                               |
| Modeling large cortical networks with growing self-organizing maps  | James A.  | Bednar             | jbednar@cs.utexas.edu                         |
| Topography from time-to-space transformations   | Jan       | Wiemer             | jan.wiemer@neuroinformatik.ruhr-uni-bochum.de |
| Speech recognition with spiking neurons and dynamic synapses: A model motivated by the human auditory pathway                   | Christian | Naeger             | naeger@in.tum.de                              |
| Sensitivity to interstimulus interval due to calcium interactions in the Purkinje cell spines                                   | Jeanette  | Hellgren Kotaleski | jhallgre@mind.krasnow.gmu.edu                 |
| Correlation and Rate-Sensitive Firing Regimes Learned with an Adaptive Spike-Dependent Plasticity Rule                          | Jesper    | Tegner             | jesper@brandeis.edu                           |
| Training Neurons With The Informax Principle  | Jianfeng  | Feng               | jianfeng@cogs.susx.ac.uk                      |
| Central and Peripheral Control of Intersegmental Coordination of Leech Swimming   | Jianhua   | Cang               | jc4r@virginia.edu                             |
| Signal loss with neural controllers   | Gabriele  | Scheler            | scheler@icsi.berkeley.edu                     |
| MULTI-LEVEL NETWORK MODELLING OF CORTICAL DYNAMICS BUILT ON THE GENESIS ENVIRONMENT   | Jonas     | Dyhrfeld-Johnsen   | dyhrfel@uni-duesseldorf.de                    |
| ACTIVITY PATTERNS IN THE INDIRECT PATHWAY OF THE BASAL GANGLIA  | David     | Terman             | terman@math.ohio-state.edu                    |
| Towards computational and robotic emulation of animal cognition and behaviour   | Jonghan   | Shin               | shin@brainway.riken.go.jp                     |
| Spectral noise shaping neural coding hypothesis: A brief history and physiological implications                                 | Jonghan   | Shin               | shin@brainway.riken.go.jp                     |

|   |             |                |   |
|---|-------------|----------------|---|
| Entrainment,Arnold tongues,and duality in a periodically driven Integrate-and-Fire model  | Joaquin     | Escalona       | oaquin@servm.fc.uaem.mx                     |
| Functional relevance of heterogeneous presynaptic release-probabilities   | Julia       | Trommershauser | trommer@theorie.physik.uni-goettingen.de    |
| Synapto-Synaptic Interactions speed up Dynamic Link Matching  | Junmei      | Zhu            | junmeizh@selforg.usc.edu                    |
| A connectivity-based model of prefrontal activity in schizophrenia  | Lars        | Kamper         | kamper@uni-duesseldorf.de                   |
| QUANTITATIVE ANALYSIS OF KERNEL PROPERTIES IN KOHONEN'S SELF-ORGANIZING MAP ALGORITHM: BUBBLE, GAUSSIAN, AND DIFFERENCE OF GAUSSIAN NEIGHBORHOODS | Mimi        | Liljeholm      | mlil@ucla.edu                               |
| Implementation of multilayer perceptron networks by populations of spiking neurons using rate coding  | Marc        | de Kamps       | kamps@fsw.leidenuniv.nl,                    |
| "Spike Sorting: A Novel Shift and Amplitude Invariant Technique"  | Karim G.    | Oweiss         | koweiss@umich.edu                           |
| Sustained Activity with Low Firing Rate in a Recurrent Network Regulated by Spike-Timing-Dependent Plasticity                                     | Katsunori   | Kitano         | kitano@brain.inf.eng.tamagawa.ac.jp         |
| INTERACTIONS AMONG CORTICAL MAPS  | Kirill N.   | Shokhirev      | kirills@socrates.berkeley.edu               |
| CLASSIFICATION OF EEG PATTERNS USING NONLINEAR DYNAMICS AND CHAOS   | Robert      | Kozma          | rkozma@memphis.edu                          |
| Spatio-temporal dynamics of epileptic seizures  | K.K.        | Jerger         | kjerger@gmu.edu                             |
| Coherence detection in a spiking neuron via Hebbian learning  | Laurent     | Perrinet       | perrinet@cert.fr                            |
| A computationally efficient abstraction of long-term potentiation   | Lokendra    | Shastri        | shastri@icsi.berkeley.edu                   |
| TRACKING RECEPTIVE FIELD DYNAMICS IN CA1 AND THE ENTORHINAL CORTEX WITH AN ADAPTIVE POINT PROCESS FILTERING ALGORITHM                             | Loren M.    | Frank          | loren@neurostat.mgh.harvard.edu             |
| A Model of Binocular Bivalry based on Competition in IT   | Luis F.     | Lago-Fernandez | luis.lago@ii.uam.es                         |
| CODING UNCERTAINTY IN POPULATIONS OF NEURONS  | Maneesh     | Sahani         | maneesh@gatsby.ucl.ac.uk                    |
| BLISS: Towards the Simulation of Brain-like Systems   | Marc-Oliver | Gewaltig       | Marc-Oliver.Gewaltig@hrtftr.frd.honda.co.jp |
| Mutual Information as a Measure of Coherence in Very Large Neuronal Networks.   | Marcelo     | Camperi        | camperi@usfca.edu                           |
| MODULATION AND MODELING OF PRESYNAPTIC FACILITATION   | Maria       | Bykhovskaia    | mb8n@virginia.edu                           |
| A FINITE STATE AUTOMATON MODEL FOR MULTI-NEURON SIMULATIONS   | Maria       | Schilstra      | m.j.1.schilstra@herts.ac.uk                 |

|  |            |           |                                 |
|--|------------|-----------|---------------------------------|
| USING INFORMATION THEORY FOR THE ANALYSIS OF CORTICAL REORGANIZATION IN A REALISTIC COMPUTATIONAL MODEL OF THE SOMATOSENSORY SYSTEM. | Marcelo    | Mazza     | mmazza@lac.usp.br               |
| TSALLIS INFORMATION MEASURE APPLIED TO THE ANALYSIS OF EEG SIGNALS IN A MODEL OF THE SOMATOSENSORY SYSTEM.                           | Marcelo    | Mazza     | mmazza@lac.usp.br               |
| SHANNON ENTROPY APPLIED TO THE ANALYSIS OF TONOTOPIC REORGANIZATION IN A COMPUTATIONAL MODEL OF CLASSICAL CONDITIONING.              | Marilene   | de Pinho  | mpinho@lac.usp.br               |
| ANALYSIS OF A MULTI-CONDUCTANCE INTEGRATED CIRCUIT MODEL OF A NEURON FOR CONSTRUCTING MOTOR PATTERN GENERATING NETWORKS              | Mario      | Simoni    | mario@ece.gatech.edu            |
| IQR: A distributed system for real-time real-world neuronal simulation   | Mark       | Blanchard | jmb@ini.phys.ethz.ch            |
| A MODEL OF DELAYED REMAPPING IN THE DENTATE GYRUS  | Mark C.    | Fuhs      | Mark.Fuhs@cs.cmu.edu            |
| Are there separate velocity-to-position integrators for saccadic commands and VOR?   | M.S.       | Goldman   | mark_g@mit.edu                  |
| Dynamic Modeling of Free-Running Hamster Circadian Rhythms   | Matthew R. | Marler    | mmarler@ucsd.edu                |
| Population coding with unreliable spikes   | Matthias   | Bethge    | mbethge@physik.uni-bremen.de    |
| From the single neuron transfer function to the population dynamics  | MAURIZIO   | MATTIA    | mattia@ibmtera.iss.infn.it      |
| Role of Oscillations in Generating a Temporal Code from a Rate Code  | Mayank R.  | Mehta     | mayank@mit.edu                  |
| Linearly Decodable Functions from Neural Population Codes  | Michael B. | Westover  | westovem@medicine.wustl.edu     |
| Curved Feature Metrics in Models of Visual Cortex  | Norbert    | Mayer     | norbert@chaos.gwdg.de           |
| The Emergence of Movement Units Through Learning with Noisy Efferent Signals and Delayed Sensory Feedback                            | Michael    | Kositsky  | kositsky@cs.umass.edu           |
| POINT-CONDUCTANCE MODELS OF CORTICAL NEURONS WITH HIGH DISCHARGE VARIABILITY   | Michael    | Rudolph   | Michael.Rudolph@iaf.cnrs-gif.fr |
| THE HIGH CONDUCTANCE STATE OF CORTICAL NEURONS INDUCES NOVEL DYNAMICS OF DENDRITIC INTEGRATION                                       | Alain      | Destexhe  | Alain.Destexhe@iaf.cnrs-gif.fr  |
| DIRECTION OF MOTION MAPS IN THE VISUAL CORTEX: A WIRE LENGTH MINIMIZATION APPROACH   | Alexei A.  | Koulakov  | akula@salk.edu                  |



|   |           |             |                            |
|---|-----------|-------------|----------------------------|
| Information transmission by stochastic synapses with short term depression: neural coding and optimization  | Nestor    | Parga       | nestor@ftnp.ft.uam.es      |
| NeuroML for Plug and Play Neuronal Modeling   | Nigel     | Goddard     | Nigel.Goddard@ed.ac.uk     |
| A NEURAL NETWORK MODEL FOR MEMORY RETRIEVAL IN A PAIR ASSOCIATION TASK  | Osamu     | Hoshino     | hoshino@cc.oita-u.ac.jp    |
| DECOMPOSITION AND INTEGRATION OF MONOSYLLABIC INFORMATION FOR AUDITORY PERCEPTUAL PROCESS   | Osamu     | Hoshino     | hoshino@cc.oita-u.ac.jp    |
| A Model of Monkey Mirror Neuron System for Grasping   | Erhan     | Oztop       | oztop@usc.edu              |
| DECREASED TRANSITION BETWEEN OPEN AND INACTIVATED CHANNEL STATES UNDERLIES THE 5HT INDUCED INCREASE OF TTX-RESISTANT Na <sup>+</sup> CONDUCTANCE IN RAT NOCICEPTORS | Pablo     | d'Alcantara | Pablo.dAlcantara@ulb.ac.be |
| Spatio-Temporal Patterns of Network Activity in the Inferior Olive  | P.        | Varona      | pvarona@lyapunov.ucsd.edu  |
| Modulation of Coherent Oscillations in Inhibitory Networks by Anesthetics   | Pamela M. | Baker       | pamela.baker@utoronto.ca   |
| A Model of the Temporal-Sequence Selectivity of HVC Neurons in the Songbird   | Patrick   | Drew        | drew@brandeis.edu          |
| SPARSE CODING OF NATURAL CONTOURS   | Patrik O. | Hoyer       | patrik.hoyer@hut.fi        |
| MULTISENSORY ENHANCEMENT IN THE SUPERIOR COLLICULUS:DERIVING SIMPLE NEURAL IMPLEMENTATIONS FOR THE BAYES' RULE MODEL  | Paul E.   | Patton      | ppatton@uiuc.edu           |
| Spike-time reliability of periodically driven integrate-and-fire neurons  | Paul      | Tiesinga    | tiesinga@salk.edu          |
| Rules relating connections to cortical structure in primate prefrontal cortex   | H.        | Barbas      | barbas@bu.edu              |
| Topographic restoration of visual spatial attention in the cortically blind cat   | C.C.      | Hilgetag    | claus@bu.edu               |
| When NMDA receptor conductances increase inter-spike interval variability   | Giancarlo | La Camera   | lacamera@cns.unibe.ch      |
| A PARALLEL GENERAL IMPLEMENTATION OF KOHONEN'S SELF-ORGANIZING MAP ALGORITHM: PERFORMANCE AND SCALABILITY   | Piotr     | Ozdzyński   | pozdzyński@ucla.edu        |
| COMPUTATION WITH CHAOTIC PATTERNS   | Péter     | András      | peter.andras@ncl.ac.uk     |
| Burst dynamics in the presence of noisy spike generation: mechanisms and time-series analysis   | Peter     | Rowat       | prowat@ucsd.edu            |

|  |           |                |                                    |
|--|-----------|----------------|------------------------------------|
| External Termination of Recurrent Bursting in a Model of Connected Local Neural Sub-Networks   | Pawel     | Kudela         | pkudela@jhmi.edu                   |
| A model of the modulation of the backpropagating action potential in a CA1 pyramidal neuron  | F.J.      | Rincker        | rincker@psy.uva.nl                 |
| CAPACITY OF PERIRHINAL CORTEX NETWORK FOR RECOGNISING FREQUENTLY REPEATING STIMULI   | Rafal     | Bogacz         | R.Bogacz@bristol.ac.uk             |
| Generalized Synaptic Updating in Temporally Asymmetric Hebbian Learning  | Ranit     | Aharonov-Barki | ranit@alice.nc.huji.ac.il          |
| Measuring Significance of Neural Elements: A Quantitative Approach   | Ranit     | Aharonov-Barki | ranit@alice.nc.huji.ac.il          |
| Entrainment of Locomotor Rhythm in the Lamprey: Experimental confirmation of a model prediction.   | Todd      | Woodrich       | Kentuckystudent@yahoo.com          |
| A Nonlinear Encoder in Crayfish Sustaining Fibers  | Raymon M. | Glantz         | rmg@bioc.rice.edu                  |
| Do neurons try to anticipate their stimuli ?   | Reinoud   | Maex           | reinoud@bbf.uia.ac.be              |
| Encoding spatial stimulus topology in the temporal domain  | Reto      | Wyss           | rwyss@ini.unizh.ch                 |
| Spike Train Analysis for Single Trial Data   | Richard   | Romero         | rickr+@cmu.edu                     |
| Catacomb- an interactive model description and computation package   | Robert C. | Cannon         | cannon@inmed.univ-mrs.fr           |
| A computational model of selfrepair in the cerebral cortex   | A.Robert  | Griffioen      | griffioe@psy.uva.nl                |
| A real-scale anatomical model of the dentate gyrus based on single cell reconstructions and 3D rendering of a brain atlas.               | Ruggero   | Scorcioni      | rscorcio@gmu.edu                   |
| DEVELOPMENTAL TRANSITION OF HUMAN'S CORTICAL CONNECTIVITY  | Ryuta     | Fukuda         | rf@sfc.keio.ac.jp                  |
| Observations and Modeling of Synchronized Bursting in 2D Neural Networks   | Ronen     | Segev          | segevr@post.tau.ac.il              |
| A quantitative evaluation of dominant membrane potential in generation of magnetic field using a pyramidal cell model at hippocampus CA3 | Seiichi   | Sakatani       | sakatani@okabe.rcast.u-tokyo.ac.jp |
| Modeling Frequency Encoding in the Cricket Cercal Sensory System   | Sharon    | Crook,         | crook@umemat.maine.edu             |
| Functional Connectivity by Cross-Correlation Clustering  | Silke     | Dodel          | silke@chaos.gwdg.de                |
| A NEURODYNAMICAL MODEL TO SIMULATE NEURAL ACTIVITIES IN VISUAL ATTENTION EXPERIMENTS   | Silvia    | Corchs         | silvia.corchs@mchp.siemens.de      |
| Burst-Enhanced Synchronization in Arrays of Coupled Neurons  | S.        | Bahar          | bahar@neurodyn.umsl.edu            |

|   |                |             |   |
|---|----------------|-------------|---|
| A Neural Field Model for Saccade Planning in the Superior Colliculus: Speed-Accuracy Tradeoff in the Double-Target Paradigm | Stefan         | Schneider   | stefan.schneider@neuroinformatik.ruhr-uni-bochum.de |
| Coding of stimulus location by spike timing in rat somatosensory cortex   | Rasmus S.      | Petersen    | petersen@sissa.it                                   |
| The role of correlated firing and synchrony in coding information about single and separate objects in cat V1               | Stefano        | Panzeri     | stefano.panzeri@ncl.ac.uk                           |
| THE EFFECTS OF LOW CHLORIDE FLUIDS ON LIGHT RESPONSES OF THE CATFISH RETINAL NEURONS  | Sung-Jong      | Lee         | chris@cmc.cuk.ac.kr                                 |
| The Influence of Synaptic Connectivity on the Pattern of Bursting Behavior in Model Pyramidal Cells                         | Keun-Hang      | Yang        | khyang@erl.neuro.jhmi.edu                           |
| A unified model of spatial and object attention based on inter-cortical biased competition                                  | Gustavo        | Deco        | Gustavo.Deco@mchp.siemens.de                        |
| A Computational Model of Attentive Visual System Induced by Cortical Neural Network   | Takamasa       | Koshizen    | koshiz@f.rd.honda.co.jp                             |
| Modeling Directional Selectivity Using Self-Organizing Delay-Adaptation Maps  | Tal            | Tversky     | tal@cs.utexas.edu                                   |
| A Computational Approach to Memory Deficits in Schizophrenia  | Lucia M.       | Talamini    | talamini@psy.uva.nl                                 |
| NemaSys: A nematode simulator for systems computational neuroscience  | Thomas Charles | Ferree      | ferree@cs.uoregon.edu                               |
| The size of receptive fields in inferior temporal visual cortex depend on attentional processing                            | Thomas P.      | Trappenberg | Thomas.trappenberg@psy.ox.ac.uk                     |
| NONLINEAR ANALYSIS OF SPATIO-TEMPORAL RECEPTIVE FIELDS: I. DYNAMIC APPROXIMATION METHOD                                     | Thomas         | Wennekers   | Thomas.Wennekers@mis.mpg.de                         |
| NONLINEAR ANALYSIS OF SPATIO-TEMPORAL RECEPTIVE FIELDS: II. DYNAMIC PROPERTIES OF V1 SIMPLE CELLS                           | Thomas         | Wennekers   | Thomas.Wennekers@mis.mpg.de                         |
| NONLINEAR ANALYSIS OF SPATIO-TEMPORAL RECEPTIVE FIELDS: III. GENERIC TUNING PROPERTIES FOR RECTIFYING RATE-FUNCTIONS        | Thomas         | Wennekers   | Thomas.Wennekers@mis.mpg.de                         |
| NONLINEAR ANALYSIS OF SPATIO-TEMPORAL RECEPTIVE FIELDS: IV. RF-RECONSTRUCTION FROM MEAN-FIELD APPROXIMATIONS                | Thomas         | Wennekers   | Thomas.Wennekers@mis.mpg.de                         |
| LOCAL CORRELATION-BASED ("PUSH-PULL") CIRCUITRY CAN ACCOUNT FOR NON-LINEAR SUMMATION OF STIMULI IN A MODEL OF CAT V1        | T.Z.           | Lauritzen   | tzl@phy.ucsf.edu                                    |
| The Ground State of Cortical Feed-Forward Networks  | Tom            | Tetzlaff    | tom@chaos.gwdg.de                                   |

|   |           |           |                                 |
|---|-----------|-----------|---------------------------------|
| Modeling the layer-V cortical pyramidal neurons showing theta-rhythmic firing in the presence of muscarine                | Tomoki    | Fukai     | tfukai@eng.tamagawa.ac.jp       |
| Regulation of Coherence in Networks of Cortical Neurons Exhibiting Gamma Rhythmic Bursts                                  | Toshio    | Aoyagi    | aoyagi@acs.i.kyoto-u.ac.jp      |
| Input Shunt Networks and Biased Competition   | Tsvi      | Achler    | achler@uiuc.edu                 |
| Synchronizing assemblies perform magnitude-invariant pattern detection  | R.D.      | Henkel    | henkel@physik.uni-bremen.de     |
| Application of Empirical Mode Decomposition and Hilbert-Transformation to Multisite Neuronal Data                         | Ulrich G. | Hofmann   | hofmann@isip.mu-luebeck.de      |
| Test of spike sorting algorithms on the basis of simulated data   | Ulrich G. | Hofmann   | hofmann@isip.mu-luebeck.de      |
| Adaptive Filtering Algorithms for Neural Spike Trains   | Uri T.    | Eden      | ueden@fas.harvard.edu           |
| MODELLING TOPOLOGY PRESERVATION IN A CORTEX BY CONTROLLED SMOOTHING OF ITS ENERGY LANDSCAPE                               | Valery    | Tereshko  | tereshko@phys.belpak.mogilev.by |
| Stimulus representation in rat primary visual cortex: multi-electrode recordings and estimation theory                    | Winrich   | Freiwald  | freiwald@brain.uni-bremen.de    |
| RECIPROCAL INHIBITION CONTROLS THE OSCILLATORY STATE IN THALAMIC NETWORKS: COMPUTATIONAL MODELING AND IN VITRO PHYSIOLOGY | Vikaas S. | Sohal     | vikaas@stanford.edu             |
| Distributed brain microstructure database system: an exoskeleton to 3D reconstruction and modeling                        | Bruce H.  | McCormick | mccormick@cs.tamu.edu           |
| Simulating the Transverse Non-Patterning Problem  | Xiangbao  | Wu        | xw3f@virginia.edu               |
| Evolution of Reinforcement Learning in Foraging Bees: A Simple Explanation for Risk-Averse Behavior                       | Yael      | Niv       | yaeln@cns.tau.ac.il             |
| Role of Calmodulin and NMDA Receptor in Temporal Coding   | Yoshihisa | Kubota    | ykubota@cco.caltech.edu         |
| Synfire Chains in a Balanced Network  | Yuval     | Aviel     | aviel@cc.huji.ac.il             |
| BUILDING A MEMORY USING BIOPHYSICALLY REALISTIC NEURONS   | Zoran     | Nenadic   | zoran@zach.wustl.edu            |
| PRINCIPAL COMPONENT ANALYSIS AND ESTIMATION IN TURTLE VISUAL CORTEX   | Zoran     | Nenadic   | zoran@zach.wustl.edu            |
| Distributed Synchrony   | Zuohua    | Zhang     | zzhang@cs.rochester.edu         |
| A GENETIC ALGORITHM FOR OPTIMIZING A NEURAL NETWORK CAPABLE TO LEARN FOR FOOD SEARCHING IN A RADIAL MAZE                  | E.V.      | Budilova  | at@ateriokhin.home.bio.msu.ru   |

|  |            |              |                                  |
|--|------------|--------------|----------------------------------|
| Morphometric Modeling of Olfactory Neurons in the Insect Brain   | Giampaolo  | D'Alessandro | G.D'Alessandro@maths.soton.ac.uk |
| A DYNAMICAL SYSTEMS APPROACH TO NEURAL COMPUTATION WITH SPIKES WITH A MODEL OF HEAD STATE ESTIMATION FOR VESTIBULO-OCULAR REFLEX CONTROL | Michael G. | Paulin       | mike.paulin@stonebow.otago.ac.nz |
| Rank Order Decoding of Temporal Parallel Fibre Input Patterns in a Complex Purkinje Cell Model   | Volker     | Steuber      | volker@bbf.uia.ac.be             |
| A NEW MODEL FOR Ca <sup>2+</sup> WAVES IN ASTROCYTES: GLUTAMATE INDUCED GLUTAMATE RELEASE  | Melissa    | Glendening   | mglenden@chem.iupui.edu          |
| A model of hippocampal circuitry mediating goal-driven navigation in a familiar environment  | Anatoli    | Gorchetnikov | anatoli@cns.bu.edu               |
| UTILITY THEORY AND NEURAL NETWORK MODELING OF COST-BENEFIT DECISION-MAKING IN A PREDATORY FORAGING MARINE SNAIL                          | L.S.       | Yafremava    | liudmila@spine.npa.uiuc.edu      |
| A Unifying Model of Center/Surround Modulations of V1 Receptive Fields as a Function of the Position in the Orientation Map              | Peggy      | Seriès       | Peggy.Series@iaf.cnrs-gif.fr     |
| Resurrecting Marr's bones: a new look at "A Theory of Cerebellar Cortex"   | Chris      | Assad        | Chris.Assad@jpl.nasa.gov         |
| Predictive Learning in Rate-Coded neuronal Networks  | Bernd      | Porr         | bp1@cn.stir.ac.uk                |
| Mechanistic Modeling of the Retinogeniculate Circuit in Cat  | Hans E.    | Plesser      | hans.plesser@itf.nlh.no          |
| Short-term plasticity shapes normal and Parkinsonian activity patterns in the globus pallidus.   | Jesse E.   | Hanson       | jhanson@emory.edu                |
| Wiener Kernel Estimation for Neural Systems with Natural Inputs  | Garrett B. | Stanley      | gstanley@deas.harvard.edu        |
| Transient synchrony as a collective mechanism for spatiotemporal integration   | Carlos D.  | Brody        | brody@cshl.org                   |
| On the Functional Role of Noise Correlations in the Nervous System   | Stefan D.  | Wilke        | swilke@physik.uni-bremen.de      |
| A General Framework for Neurobiological Modeling: An Application to the Vestibular System  | Chris      | Eliasmith    | eliasmith@uwaterloo.ca           |
| POSTSYNAPTIC CURRENT ANALYSIS OF A MODEL PREFRONTAL CORTICAL CIRCUIT FOR SPATIAL WORKING MEMORY  | Masafumi   | Iida         | masafu-i@sophia.ac.jp            |
| CORRELATION ANALYSIS OF SIGNAL FLOW IN A MODEL PREFRONTAL CORTICAL CIRCUIT   | Kazushige  | Morooka      | k-morook@sophia.ac.jp            |

|  |       |           |                             |
|--|-------|-----------|-----------------------------|
| MULTI-DIRECTIONAL<br>REPRESENTATION OF SPATIAL<br>WORKING MEMORY IN A MODEL<br>PREFRONTAL CORTICAL CIRCUIT | Shoji | Tanaka    | tanaka-s@sophia.ac.jp       |
| CIRCUIT SIMULATION OF MEMORY<br>FIELD MODULATION BY DOPAMINE D1<br>RECEPTOR ACTIVATION                     | Kouki | Yamashita | kooki-y@sophia.ac.jp        |
| SYNAPTIC INTEGRATION IN SUBPIAL<br>CELLS   | Xiao  | Luo       | xiaoluo@midway.uchicago.edu |
| Rate Dynamics in Integrate-and-Fire<br>Neurons: Two Regimes and Multiple Time<br>Scales                    | Todd  | Troyer    | todd@psyc.umd.edu           |