

**10th Tamagawa-Riken
Dynamic Brain Forum
DBF '07
PROGRAM**

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March 7 - 9, 2007,

Hakuba Tokyu Hotel in Hakuba Village,

Nagano Prefecture, Japan

DBF'07 FORUM PROGRAM

March 7	9;00	<p>Opening Talk</p> <p>Prof. Yoshiaki Obara, The President of Tamagawa University</p> <p>Dr. Shun-ichi Amari, Director of RIKEN Brain Science Institute</p> <p>Prof. Takashi Yamakawa, Kyushu Institute of Technology</p> <p>Chairperson: Prof. Shigetoshi Nara, Program Committee Chairman</p>
	9;30	<p>7-AB1: Invited Talk by Dr. Hugh Robinson</p> <p>Regular and irregular firing in cortical neurons</p> <p>Chairperson: Prof. Kazuyuki Aihara</p>
	10:10	<p>7-AB2: Invited Talk by Prof. James Wright</p> <p>Cortical Anatomy and the Spatiotemporal Learning Rule</p> <p>Chairperson: Prof. Kazuyuki Aihara</p>
	10;50	Coffee Break
	11;00	<p>7-AB3: Invited Talk by Prof. Alessandro Treves</p> <p>DISSECTING THE CONTRIBUTION OF HIPPOCAMPAL SUBFIELDS TO MEMORY COMPUTATIONS</p> <p>Chairperson: Prof. Ichiro Tsuda</p>
	11;40	<p>7-AB4: Invited Talk by Prof. Nikola Kasabov</p> <p>Computational neurogenetic modelling - towards modelling dynamic gene networks as part of dynamics spiking neural network models of brain functions and diseases</p> <p>Chairperson: Prof. Ichiro Tsuda</p>
	12;20	<p>7-AB5: Invited Talk by Dr. Keiji Tanaka</p> <p>Inferotemporal cortex and visual object recognition</p> <p>Chairperson: Prof. Ichiro Tsuda</p>
	13;00	
	14;00	Lunch

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		Session A	Session B
March 7	14:00	7-A6: Mr. Hiroki Kurashige Simulation and analytical models for synaptic plasticity using a sliding threshold as linear summation of calcium concentration Chairperson: Prof. Hiroshi Fujii	7-B6: Mr. Satoru Tadokoro In-Out Intermittency and Chaotic Itinerary in Gap Junction-Coupled Class I* Neurons Chairperson: Prof. Hatsuo Hayashi
	14:20	7-A7: Mr. Marcel Oberlaender Automatic Reconstruction of Single Neurons. Chairperson: Prof. Hiroshi Fujii	7-B7: Mr. Wolfgang. Pauli Attentional control of associative learning- a possible role of the central cholinergic system Chairperson: Prof. Hatsuo Hayashi
	14:40	7-A8: Dr. Hidenori Watanabe Distance-Dependent Response Property of the Dendrites in Hippocampal CA1 pyramidal cells Chairperson: Prof. Hiroshi Fujii	7-B8: Dr. Robert C. Froemke Neuromodulation and plasticity of adult cortical networks Chairperson: Prof. Hatsuo Hayashi
	15:00	Coffee Break	
	15:10	7-A9: Dr. Abigail Morrison Spike-timing dependent plasticity in balanced random networks Chairperson: Prof. Peter Erdi	7-B9: Dr. Kenji Morita How is γ -modulated firing of neocortical regular spiking neurons shaped by recurrent inputs ? Chairperson: Prof. Shuji Aou
	15:40	7-A10: Prof. Gaute T. Einevoll Estimation of cortical columnar circuit model from joint thalamic single-electrode and cortical laminar -electrode recordings in rat whisker-barrel system Chairperson: Prof. Peter Erdi	7-B10: Dr. Pei-Ji Liang Spatiotemporal Response Patterns Encode Motion information in Retina Chairperson: Prof. Shuji Aou
	16:10	7-A11: Dr. Eiji Hoshi Five anatomical and physiological networks in the frontal cortex for planning and executing reaching movements Chairperson: Prof. Peter Erdi	7-B11: Prof. Takeshi Aihara The information processing on dendrites in hippocampal CA1 area Chairperson: Prof. Shuji Aou
	16:40	Coffee Break	
	16:50	7-A12: Dr. Greg Stephens Dimensionality and dynamics in the motor behavior of <i>C. elegans</i> Chairperson: Dr. Kenji Doya	7-B12: Dr. Hiromichi Suetani Kernel CCA and Empirical Mode Decomposition for Analysis of Nonlinear Dependence in Coupled Oscillators Chairperson: Prof. James Wright
	17:20	7-A13: Dr. Charles Peck An Integrated Cerebro-Cerebellar Model Demonstrating Associative Learning and Motor Control Chairperson: Dr. Kenji Doya	7-B13: Prof. Guy Sandner Prospects for a pathophysiological approach of schizophrenia Chairperson: Prof. James Wright
	17:50	7-A14: Prof. Antonio Roque A large-scale and biologically detailed model of the olfactory system Chairperson: Dr. Kenji Doya	7-B14: Dr. James Kozloski A Network for Computing Topographic Information With An Overcomplete Basis: Correlates With The Neocortical Microcircuit Chairperson: Prof. James Wright
	18:20	Dinner	
	19:30	Poster session	
22:30			

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March 8	9:00	8-AB1: Special Talk by Prof. Moshe Abeles Space and Time of Cortical Activity Chairperson: Prof. Gert Hauske
	9:40	8-AB2: Invited Talk by Prof. Barry J. Richmond Behavioral, physiological, genetic, and modeling experiments investigating motivation and reward expectancy Chairperson: Prof. Gert Hauske
	10:20	Coffee Break
	10:30	8-AB3: Invited Talk by Prof. Paul E. Cisek Cortical dynamics of action specification and selection Chairperson: Prof. Jun Tanji
	11:10	8-AB4: Invited Talk by Dr. Okihide Hikosaka Role of the medial frontal cortex in switching from automatic to controlled behavior Chairperson: Prof. Jun Tanji
	11:50	8-AB5: Special Talk by Prof. Aike Guo The Value-Based Decision-Making, from Fruit Fly to Human Being Chairperson: Prof. Jun Tanji
	12:30	Lunch
	14:00	

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		Session A	Session B
March 8	14:00	8-A6: Mr. Tai Tanaka Move control by means of chaotic dynamics introduced into a recurrent neural network model with quasi-two-layer structure Chairperson: Prof. Ad Aertsen	8-B6: Dr. Yoshinori Ide Optical Imaging of Plastic Changes Induced by Fear Conditioning in The Auditory Cortex of Guinea Pig Chairperson: Prof. Guy Sandner
	14:20	8-A7: Dr. Yasuhiro Fukushima The potentials of Cantor-like coding processing in hippocampal CA1 pyramidal Neurons Chairperson: Prof. Ad Aertsen	8-B7: Mr. Daniel Yasumasa Takahashi On Partial Directed Coherence Factor, Granger Causality and Information Theory Chairperson: Prof. Guy Sandner
	14:40	8-A8: Mr. Takamasa Yoshida Spatial Coherence of Ongoing and Spontaneous Activities in Auditory Cortex Chairperson: Prof. Ad Aertsen	8-B8: Dr. Atsushi Noritake Prefrontal activities under a go/no-go conditional discrimination task Chairperson: Prof. Guy Sandner
	15:00	Coffee Break	
	15:10	8-A9: Prof. Hiroyuki Ito Non-stationary dynamics of synchronous oscillatory spike events in the visual pathway - Bootstrap significance test - Chairperson: Prof. Aike Guo	8-B9: Prof. Katsumi Tateno Dynamical properties of mathematical models of sleep-wake cycles in autism Chairperson: Prof. Fanji Gu
	15:40	8-A10: Prof. Gert Hauske Biological Vision Systems as Optimal Nonlinear Coders Chairperson: Prof. Aike Guo	8-B10: Dr. Michael Denker Identifying relationships between field amplitudes, synchrony and spike-field locking Chairperson: Prof. Fanji Gu
	16:10	8-A11: Dr. Kensaku Nomoto Reward predictive activity of dopamine neurons in random dot motion discrimination task Chairperson: Prof. Aike Guo	8-B11: No session
	16:50	Poster session	
	19:30	Banquet	
	21:30		

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March 9	9:00	9-AB1: Invited Talk by Prof. W. A. Phillips The dynamic coordination of cortical activities Chairperson: Prof. Masamichi Sakagami
	9:40	9-AB2: Invited Talk by Dr. Makio Kashino Sensorimotor interaction in speech processing Chairperson: Prof. Masamichi Sakagami
	10:20	9-AB3: Invited Talk by Prof. Wolfram Schultz Rewards for Prediction and Feedback Chairperson: Prof. Masamichi Sakagami
	11:00	Coffee Break
	11:10	9-AB4: Invited Talk by Dr. Michale S. Fee Chairperson: Prof. Walter Freeman
	11:50	9-AB5: Invited Talk by Dr. Daeyeol Lee Prefrontal Cortex and Dynamic Decision Making Chairperson: Prof. Walter Freeman
	12:30 12:40	Closing Talk by Prof. Minoru Tsukada