

Program at a Glance

	8:30	10:00 12:00		13:00	15:20 17:30	18:00	20-
Jun 9 Thu	13:00, 15:30 Shuttle bus (New Chitose Airport → Hilton Niseko Village)					Opening ceremony [Hokkaido]	YRF [Room A]
	Reception desk open [Yotei]						
Jun 10 Fri	Plenary 1,2 [Hokkaido]	Neuronal Impulse, Patterns & Bifurcations [Room A]	Editorial Meeting	Integrative & Multi-level Approaches for Cognitive Neurodynamics [Room A]	15:20-17:20 Poster presentation and best poster voting (Odd:15:20-16:20 Even:16:20-17:20) [Yotei]	17:30-19:30 Invited Lecture [Hokkaido]	Poster removal
		Model Complexity in Neural Network Phenomena [Room B]		Toward Understanding of Intelligence: Collaboration between Neuroscience & Robotics [RoomB]			
		DBF-1 [Room C]		DBF-2 [Room C]			
Jun 11 Sat	Plenary 3,4 [Hokkaido]	Spatiotemporal Network Dynamics [Room A] Shaping Embodied Neurodynamics Through Interaction [Room B] DBF-3 [Room C]		Excursion 13:15 at hotel lobby		Banquet [Hokkaido]	
Jun 12 Sun	Plenary 5,6 [Hokkaido]	Mathematical & Statistical Aspects of Neurodynamics (1) [Room A]	Editorial Meeting	Mathematical & Statistical Aspects of Neurodynamics (2) [Room A]	Dynamic Patterns of Neural Activity in Human Information Processing [Room A]	Closing ceremony [Hokkaido]	YRF [Room A]
		Neural Basis of Biological Timing [Room B]					
		DBF-4 [Room C]		DBF-5 [Room C]			
Jun 13 Mon	9:00, 11:30 Shuttle bus (Hilton Niseko Village → New Chitose Airport)						

Plenary Lectures

PL1 Artificial cognitive systems with active learning and situation awareness capabilities

June 10 (Fri) 8:30-9:10 Room Hokkaido

Soo-Young Lee

Department of Electrical Engineering, Department of Bio & Brain Engineering, Brain Science Research Center,
Korea Advanced Institute of science and Technology, Korea

Chairperson: Pitoyo Hartono

PL2 Dynamic neuronal representation in the prefrontal cortex

June 10 (Fri) 9:15-9:55 Room Hokkaido

Hajime Mushiake

¹Department of Physiology, Tohoku University School of Medicine, Japan

²CREST, JST, Tokyo, Japan

Chairperson: Masamichi Sakagami

PL3 Timing at multiple scales in olfactory perception

June 11 (Sat) 8:30-9:10 Room Hokkaido

Leslie M Kay

Institute for Mind and Biology and Department of Psychology,
The University of Chicago, Chicago, USA

Chairperson: Kazuyuki Aihara

PL4 Structure, stability, dynamics, and geometry in brain networks

June 11 (Sat) 9:15-9:55 Room Hokkaido

Peter Robinson

¹ School of Physics, University of Sydney, Australia

² Brain Dynamics Center, Sydney Medical School - Western,
University of Sydney, Australia

Chairperson: Hans Lijenstrom

PL5 Neuropercolation approach to singular space-Time dynamics of cortical processes

June 12 (Sun) 8:30-9:10 Room Hokkaido

Roboer Kozma

¹ Department of Mathematical Sciences, The University of Memphis, USA

² CLION - Center for Large-Scale Integrated Optimization and Networks, USA

Chairperson: Peter Erdi

PL6 Impact of postnatal and adult neurogenesis on animal behavior

June 12 (Sun) 9:15-9:55 Room Hokkaido

Noriko Ohsumi

Tohoku University School of Medicine, Japan

Chairperson: Hiroshi Fujii

Invited Lectures

June 10 (Fri) 17:30-19:30 Room Hokkaido

ECoG Patterns in short-term (STM) vs. long-term (LTM) Memory Formation

Walter J Freeman
University of California, USA

Chairperson: Shigetoshi Nara

Mathematical Theory of Neural Networks— A Personal and Historical Survey

Shun-ichi Amari
Lab. for Mathematical Neuroscience,
RIKEN Brain Science Institute (BSI), Japan

Chairperson: Cees van Leeuwen

Memory Information Representation in the Hippocampus

Minoru Tsukada
Brain Science Institute, Tamagawa University, Japan

Chairperson: Barry J Richmond

Friday (Day1) Morning Sessions

- Room A** **Neuronal Impulse Patterns, Bifurcations, Chair: Takeshi Aihara**
- FriAm-A1 Dendritic dimensions and signal conduction properties of cortical
10:00 nonpyramidal cells. *Yoshiyuki Kubota, Fuyuki Karube, Masaki Nomura, Allan T. Gullledge, Atsushi Mochizuki, Yasuo Kawaguchi*
- FriAm-A2 A Computational study of the role of the Sub-thalamic Nucleus in behavioral
10:20 switching during saccadic movements.
Maithreye Rengaswamy, Srinivasa Chakravarthy
- FriAm-A3 Estimating network weights from the inverse phase synchronization index
10:40 matrix.
Won Sup Kim, Xue-Mei Cui, Chang No Yoon, Xuan Hung Ta, Seung Kee Han
- FriAm-A4 Spiking neural network ink drop spread spike-IDS.
11:00 *Mohsen Firouzi, Saeed Bagheri Shouraki, Mohammad Ghomi Rostami.*
- FriAm-A5 A biophysical model of neuro-glial-vascular interactions.
11:20 *Bankim Chander, Srinivasa Chakravarthy*
- Room B** **Model Complexity in Neural Network Phenomena, Chair:**
Changsong Zhou
- FriAm-B1 Model complexity in the study of neural network phenomena.
10:00 *Claus C. Hilgetag, Changsong Zhou.*
- FriAm-B2 From spiking neurons to neural fields: Bridging the gap to achieve faster
10:20 simulations of neural systems. *Peter Robinson, Jong Won Kim.*
- FriAm-B3 Multi-population network models of the cortical microcircuit.
10:40 *Tobias Potjans, Markus Diesmann.*
- FriAm-B4 Attentional cholinergic projections may induce transitions of attractor
11:00 landscape via presynaptic modulations of connectivity.
Hiroshi Fujii, Takashi Kanamaru, Kazuyuki Aihara, Ichiro Tsuda
- FriAm-B5 Effects of ion channel block on the propagation of neuronal activity in a
11:20 feedforward network. *Muhammet Uzuntarla, Mahmut Ozer, Etem Koklukaya.*
- Room C** **Dynamic Brain Forum (1), Chair: Ichiro Tsuda**
- FriAm-C1 Heterogeneity-induced pulse generators.
10:00 *Yasumasa Nishiura, Takashi Teramoto, Masaaki Yadome.*
- FriAm-C2 Designing plasticity and robustness through evolution and learning.
10:20 *Kunihiko Kaneko.*
- FriAm-C3 Influence of the endogenous acetylcholine on STDP induction.
10:40 *Takeshi Aihara, Eriko Sugisaki, Yasuhiro Fukushima, Minoru Tsukada*
- FriAm-C4 Transition dynamics in spatial choice.
11:00 *Jan Lauwereyns.*
- FriAm-C5 Perseveration of complex response sequences as a mechanism underlying
11:20-12:00 34-Methylenedioxymethamphetamine (MDMA or "ecstasy") induced memory
impairments. *David Harper.*

Friday (Day1) Afternoon Sessions

- Room A** ***Integrative and Multi-Level Approaches for Cognitive Dynamics***, Chair: *Yoshiyuki Asai*
- FriPm1-A1 Using selective ablations to infer neuronal circuit processing and information flow about predicted reward outcomes of ongoing behavior. *Barry Richmond*
13:00
- FriPm1-A2 Learning and memory phenomena in a complex sensory environment: a transdisciplinary approach. *Alessandro Villa, Vladyslav Shaposhnyk*
13:20
- FriPm1-A3 Noise and chaos in mesoscopic brain dynamics - possible relevance for mental disorders. *Hans Liljenstrom*
13:40
- FriPm1-A4 Physiologically-based modeling of shift workers •sleepiness.
14:00 *Svetlana Postnova, Peter Robinson*
- FriPm1-A5 Conductance-based models of neurones and synapses as the basis of multi-level simulations. *Hans Albert Braun, Karl Voigt, Svetlana Postnova*
14:20
- FriPm1-A6 Towards a modeling and simulation platform for multi-level neuronal networks. *Yoshiyuki Asai, Hideki Oka, Taishin Nomura, Hiroaki Kitano*
14:40
- Room B** ***Toward Understanding of Intelligence: Collaboration Between Neuroscience and Robotics***, Chair: *Hironori Nakatani*
- FriPm1-B1 Neural synchrony for expert memory in shogi (Japanese chess) players.
13:00 *Hironori Nakatani, Yoko Yamaguchi*
- FriPm1-B2 Neuronal synchrony during the planning and execution period in the prefrontal cortex. *Kazuhiro Sakamoto, Katsutoshi Yamamoto, Naohiro Saito, Kazuyuki Aihara, Jun Tanji, Hajime Mushiake*
13:20
- FriPm1-B3 A constructive approach for investigating the emergence of role division in social interactions. *Kenichi Minoya, Takaya Arita, Takashi Omori*
13:40
- FriPm1-B4 Estimating similarity judgment processes based on neural activities measured by near-infrared spectroscopy (NIRS).
14:00 *Yoshihiko Suzuki, Shohei Hidaka*
- FriPm1-B5 Autonomous robot with internal topological representation.
14:20 *Pitoyo Hartono, Thomas Trappenberg*
- FriPm1-B6 SUDOKU puzzle: the neurodynamics of intelligence to choose the right solution from many possible options in a hypothetical reasoning.
14:40 *Hiroaki Wagatsuma*
- Room C** ***Dynamic Brain Forum (2)***, Chair: *Jan Lauwereyns*
- FriPm1-C1 Meta-stable states in taste processing.
13:00-13:40 *Donald Katz*
- FriPm1-C2 The schizophrenic brain: A broken hermeneutic circle. Zyxxvvsome new insights and results. *Peter Erdi, Mihaly Banyai, Vaibhav Diwadkar*
13:40-14:20
- FriPm1-C3 Multiple neural circuits in value-based decision-making.
14:20-14:40 *Masamichi Sakagami*
- FriPm1-C4 Towards understanding of neural dynamics in communicating brains.
14:40-15:00 *Ichiro Tsuda*

Saturday (Day2) Morning Sessions

- Room A** **Spatiotemporal Network Dynamics**, Chair: Claus C. Hilgetag
- SatAm-A1 Modular organization enables both self-Organized criticality and oscillations
10:00 in neural systems. *Shengjun Wang, Claus C. Hilgetag, Changsong Zhou*
- SatAm-A2 Traveling waves on locally connected chaotic neural networks and their
10:20 phenomenological modeling. *Makito Oku, Kazuyuki Aihara*
- SatAm-A3 Spatial filtering by a two-dimensional interconnected network with spike
10:40 timing dependent synaptic plasticity depending on its temporal properties.
Kazuhisa Fujita
- SatAm-A4 Neural model for hierarchical processing of auditory information in
11:00 mammal's cortex. *Yusuke Hara, Yoshiki Kashimori*
- SatAm-A5 Modeling dynamics of the human limbic system.
11:20 *Mark Myers, Robert Kozma*
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- Room B** **Shaping Embodied Neurodynamics Through Interactions**,
Chair: Hiroki Mori
- SatAm-B1 Infant's primitive walking reflex from the perspective of learning in the
10:00 uterus. *Hiroki Mori, Yasuo Kuniyoshi*
- SatAm-B2 Socially developmental robot based on self-Induced contingency with multi
10:20 latencies.
Hidenobu Sumioka, Yuichiro Yoshikawa, Masanori Morizono, Minoru Asada
- SatAm-B3 On the brain's dynamical complexity: coupling and causal influences across
10:40 spatiotemporal scales. *Emmanuelle Tognoli, J.A. Scott Kelso*
- SatAm-B4 Development of infant robot with musculoskeletal and skin system.
11:00 *Kenichi Narioka, Soichiro Moriyama, Koh Hosoda*
- SatAm-B5 Formulating a cognitive branching task by MTRNN: A robotic neuroscience
11:20 experiments to simulate the PFC and its neighboring regions.
Fady Alnajjar, Yuichi Yamashita, Jun Tani
- SatAm-B6 Neurodynamical account for altered awareness of action in schizophrenia: a
11:40 synthetic neuro-robotic study. *Yuichi Yamashita, Jun Tani*
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- Room C** **Dynamic Brain Forum (3)**, Chair: Jan Lauwereyns
- SatAm-C1 Cross-episode coupling of distinct recollections in hippocampal ensemble
10:00-10:40 representations. *Andre Fenton*
- SatAm-C2 The encoding of intended destinations by neurons in the hippocampus.
10:40-11:20 *Paul A. Dudchenko, Emma R. Wood, David Bett*
- SatAm-C3 The dynamics of deliberation.
11:20-12:00 *David Redish*

Sunday (Day3) Morning Sessions

Room A **Mathematical and Statistical Aspects of Neurodynamics (1)**, Chair: *Shun-ichi Amari*

- SunAm-A1 10:00 Robust computation in two-dimensional neural field.
Yuzuru Sato, Shun-ichi Amari
- SunAm-A2 10:20 Dynamical synapses enhance neural computation.
Chi Chung Alan Fung, K. Y. Michael Wong, Si Wu
- SunAm-A3 10:40 Input dependent variability in a model of the striatal medium spiny neuron network. *Adam Ponzi, Jeff Wickens*
- SunAm-A4 11:00 Selection criteria for neuromanifolds of stochastic dynamics.
Nihat Ay, Guido Montufar, Johannes Rauh
- SunAm-A5 11:20 A manipulative approach to neural dynamics by combined TMS-EEG.
Keiichi Kitajo, Yumi Nakagawa, Yutaka Uno, Ryohei Miyota, Masanori Shimono, Kentaro Yamanaka, Yoko Yamaguchi

Room B **Neural Basis of Biological Timing**, Chair: *Ken-ichi Honma*

- SunAm-B1 10:00 Oscillator cell networks in the hypothalamic suprachiasmatic nucleus the mammalian circadian clock. *Sato Honma, Daisuke Ono, Ken-ichi Honma*
- SunAm-B2 10:20 Oscillator network modeling of circadian rhythm in the suprachiasmatic nucleus. *Isao Tokuda, Hirokazu Fukuda, Naoto Hayasaka*
- SunAm-B3 10:40 Underlying mechanism that generates a phase wave in the mammalian circadian center. *Yasufumi Shigeyoshi, Satoshi Koinuma, Takeshi Asakawa, Koh-hei Masumoto, Mamoru Nagano*
- SunAm-B4 11:00 Toward in silico modeling of suprachiasmatic nucleus.
Mitsuyuki Nakao, Akihiro Karashima, Norihiro Katayama
- SunAm-B5 11:20 In vivo monitoring of circadian output in clock mutant mice.
Wataru Nakamura
- SunAm-B6 11:40 Design principle of precise neural clocks.
Hiroshi Kori, Yoji Kawamura, Naoki Masuda

Room C **Dynamic Brain Forum (4)**, Chair: *Ichiro Tsuda*

- SunAm-C1 10:00 Correlated brain activations during formation of memory for future plans.
Jiro Okuda, Maki Suzuki, Toshikatsu Fujii
- SunAm-C2 10:20 Cognitive modeling of human-robot interaction estimating other's internal state. *Takashi Omori, Ayami Yokoyama, Kasumi Abe, Takayuki Nagai.*
- SunAm-C3 10:40 Symbol communication systems integrate implicit information in coordination tasks. *Takeshi Konno, Junya Morita, Takashi Hashimoto*
- SunAm-C4 11:00 A model study on multiple frequency phase synchronization of human EEG.
Yoko Yamaguchi, Masahiro Kawasaki, Yuichiro Yamanaka, Keiichi Kitajo, David Taiwai Chik
- SunAm-C5 11:20 Intermittent brain motor control observed in continuous tracking task.
Yutaka Sakaguchi
- SunAm-C6 11:40 Molecular and neural mechanisms for behavioral choice between two conflicting alternatives in *C. elegans*. *Takeshi Ishihara*

Sunday (Day3) Afternoon Sessions I

Room A *Mathematical and Statistical Aspects of Neurodynamics (2),*

Chair: Taro Toyozumi

SunPm1-A1 13:00 Mean-field approximations for coupled populations of GLM spiking neurons with Markov refractoriness. *Taro Toyozumi*

SunPm1-A2 13:20 Long-tailed statistics of corticocortical EPSPs: Origin and computational role of noise in cortical circuits.

Jun-nosuke Teramae, Yasuhiro Tsubo, Tomoki Fukai

SunPm1-A3 13:40 Lognormal-like distributions of synaptic weights and STDP in recurrent neuronal networks. *Matthieu Gilson, Tomoki Fukai*

SunPm1-A4 14:00 On a theory of precise neural control in a noisy system.

Wenlian Lu, Shun-ichi Amari, David Waxman, Jianfeng Feng

SunPm1-A5 14:20 Dynamic logic for "Vague-to-Crisp" perception and dynamics of operant (selectionist) learning.

Roman Ilin, Leonid Perlovsky, Robert Kozma, Jun Zhang

SunPm1-A6 14:40 Real-time wireless sonification of brain signals. *Mohamed Elgendi, Brice Rebsamen, Francois Vialatte, Andrzej Cichocki, Justin Dauwels*

Room C *Dynamic Brain Forum (5), Chair: Jan Lauwereyns*

SunPm1-C1 13:00-13:40 Collective neural oscillations: mechanisms and functionality.

Jordi Garcia-Ojalvo

SunPm1-C2 13:40-14:20 The phase space of lateral thought.

Eleonora Russo, Alessandro Treves

SunPm1-C3 14:20-15:00 Learning and decisions as functional states of cortical circuits.

Jose Maria Delgado-Garcia, Raudel Sánchez-Campusano, Agnès Gruart i Massó

Sunday (Day3) Afternoon Sessions II

Room A ***Dynamic Patterns of Neural Activity in Human Information Processing, Chair: Cees van Leeuwen***

- SunPm2-A1 Self-organizing dynamic neural fields.
15:20 *Nicolas Rougier, Georgios Is. Detorakis*
- SunPm2-A2 Spontaneous EEG activity and biases in perception of supra-threshold stimuli. *Andrey Nikolaev, Sergei Gepshtein, Cees van Leeuwen*
15:40
- SunPm2-A3 Functional roles of corticofugal plasticity in detecting a moving target in bat's auditory system.
16:00 *Yoshitaka Muto, Yoshihiro Nagase, Yoshiki Kashimori*
- SunPm2-A4 The origin of the spatial pattern of amplitudes in trial-averaged MEG.
16:20 *David M. Alexander, Peter Jurica, Andrey R. Nikolaev, Mikhail Zvyagintsev, Klaus Mathiak, Cees van Leeuwen*
- SunPm2-A5 Rhythm matters: A case in attentional blink.
16:40 *Chie Nakatani, Cees van Leeuwen*
- SunPm2-A6 Complex network topology and dynamics in networks supporting precisely-timed activity patterns.
17:00 *Chris Trengove, Cees van Leeuwen, Markus Diesmann*

Room C ***Dynamic Brain Forum (6), Chair: Ichiro Tsuda***

- SunPm2-C1 Exploring phase shifts in mesoscopic brain dynamics - For deeper understanding of brain-mind relations. *Hans Liljenstrom*
15:30-16:10
- SunPm2-C2 An information theoretic approach to prediction and deliberative decision-making of embodied systems. *Nihat Ay, Keyan Zahedi*
16:10-16:50
- SunPm2-C3 Cell assemblies in the neostriatal network.
16:50-17:20 *Jeff Wickens, Adam Ponzi*

Poster Session

June 10 (Fri) PM 3:20-5:20 Poster Room (“Yotei”)

Core time (Odd paper ID : 15:20-16:20, Even paper ID: 16:20-17:20)

- P01 Ongoing global phase pattern and visual signal detection.
Daisuke Shimaoka, Keiichi Kitajo, Kunihiko Kaneko, Yoko Yamaguchi
- P02 Model on visualization and analysis for peripheral drift illusion.
Keiichiro Inagaki, Shiro Usui
- P03 Saccade related cortical potential by cued movements and free movements.
Arao Funase, Andrzej Cichocki, Ichi Takumi
- P04 Differentiation through symbolic communication.
Takuma Torii, Takashi Hashimoto
- P05 Theoretical analysis of phase resetting on Matsuoka oscillators.
Kazuki Nakada, Yasuomi Sato, Kiyotoshi Matsuoka
- P06 "Memories as Bifurcations": A simple model.
Tomoki Kurikawa, Kunihiko Kaneko
- P07 Biologically inspired closed-loop model of precision grip lifting task.
Ankur Gupta, Manikanta Avinash, Deepa Ranjith, Muthu Kumar, Suresh Devasahayam, K. Srinivasa Babu, V. Srinivasa Chakravarthy
- P08 A communicative model: Can we interpret neural dynamics of understanding?.
Yongtao Li, Ichiro Tsuda
- P09 Intermittent update of target representation during manual tracking task.
Tetsumasa Asano, Jun Izawa, Yutaka Sakaguchi
- P10 Multi-Dynamics learning algorithm based on SOM2. *Satoshi Matsushita, Takashi Ohkubo, Tetsuo Furukawa*
- P11 Spontaneous switching of the direction of information flow.
Yutaka Yamaguchi, Ichiro Tsuda
- P12 Error-type-dependent saccade dynamics during visual search.
Atsushi Fujimoto, Satsoshi Nishida, Tadashi Ogawa
- P13 Design and dynamics of active-touch sensory model.
Tatsuo Yanagita
- P14 Human object recognition based on internal models of the human hand.
Masazumi Katayama, Tatsuya Kurisu
- P15 Estimation of children's interest dynamics while communicating with robots.
Takayuki Shimotomai, Kasumi Abe, Ayami Yokoyama, Takayuki Nagai, Takashi Omori.
- P16 Robotic motion coach: Effect of motion emphasis and verbal expression for imitation learning. *Tetsunari Inamura, Keisuke Okuno*

- P17 Synthetic approach to understanding meta-level cognition of predictability in generating cooperative behavior.
Jun Namikawa, Ryunosuke Nishimoto, Hiroaki Arie, Jun Tani
- P18 Neural correlates of cognitive dissonance and decision conflict.
Keise Izuma, Madoka Matsumoto, Kou Murayama, Kazuyuki Samejima, Sadato Norihiro, Kenji Matsumoto
- P19 Social biases on economical decision making in domestic chicks: kleptoparasitism work investment and choice impulsivity.
Toshiya Matsushima, Yukiko Ogura, Hidetoshi Amita
- P20 Neural networks to do bayesian decision compare multiple results and practice according to episodic memory making hierarchical basins. *Mitsuo Takase*
- P21 Learning values of multi-dimensional stimulus in cognitive decision-making.
Kazuyuki Samejima, Satoshi Nonomura, Yasuhiro X. Kato, Yoshiya Yamaguchi, Kenji Doya, Jun Tanji
- P22 Cantor coding of song sequence in the Bengalese finch HVC.
Jun Nishikawa, Kazuo Okanoya
- P23 Inhibitory network dependency in Cantor coding. *Yasuhiro Fukushima, Yoshikazu Isomura, Yutaka Yamaguti, Shigeru Kuroda, Ichiro Tsuda, Minoru Tsukada.*
- P24 Sequential memory retention by stabilization of cell assemblies.
Timothee Leleu, Kazuyuki Aihara
- P25 Statistical estimation of non-uniform distribution of dendritic membrane properties.
Toshiaki Omori, Toru Aonishi, Masato Okada
- P26 Optical imaging of neuronal activity during song recognition in female zebra finch.
Fumihiko Takayama, Yosuke Maruyama, Kohji Hotta, Kotaro Oka
- P27 Context-dependent call variation in the male Bengalese finch.
Midori Osada, Tetsu Okumura
- P28 Capturing the global behavior of dynamical systems with Conley-Morse graphs.
Zin Arai, Hiroshi Kokubu
- P29 A heuristic model of intra-brain communications using chaos in artificial neuron systems. *Yu Arai, Ryota Mori, Fuyuki Aoto, Sigetoshi Nara*
- P30 Transitory memory retrieval in the neural networks composed of Pinsky-Rinzel model neurons. *Hiromichi Tsukada, Yutaka Yamaguti, Hiroshi Fujii, Ichiro Tsuda.*
- P31 Dynamic information processing in the supplementary eye field of monkeys during hypothesis testing behavior. *Norihiko Kawaguchi, Kazuhiro Sakamoto, Yoshito Furusawa, Naohiro Saito, Jun Tanji, Hajime Mushiake*
- P32 Simple dynamical models to understand the mechanism of drug addiction.
Takashi Tateno
- P33 Toward an animal model of spatial hemineglect: preliminary investigation.
Masatoshi Yoshida
- P34 Prestimulus neural oscillations contribute to recollection and familiarity.
Florence Kleberg, Keichi Kitajo, Masahiro Kawasaki, Yoko Yamaguchi
- P35 Contribution of the cholinergic innervation to early memory development in the neonate para-Hippocampal system. *Alexandre Pitti, Yasuo Kuniyoshi*

- P36 Unintentional synchronization of behavior in Japanese monkeys.
Yasuo Nagasaka, Zenas C Chao, Naomi Hasegawa, Tomonori Notoya, Naotaka Fujii
- P37 Effects of medial amygdala lesions upon social behaviour in mice.
Yu Wang, Yuki Takayanagi, Tatsushi Onaka
- P38 Theta-burst stimulation induces long-term potentiation during beta oscillation but not induce during the epileptic discharges in rat hippocampal slices.
Motoshi Nishimura, Kiyohisa Natsume
- P39 Integration of hetero inputs to guinea pig auditory cortex established by fear conditioning. *Yoshinori Ide, Muneyoshi Takahashi, Johan Lauwereyns, Minoru Tsukada, Takeshi Aihara*
- P40 The theta cycle and spike-Timing during fixation in rat hippocampal CA1.
Muneyoshi Takahashi, Yoshio Sakurai, Yoshikazu Isomura, Minoru Tsukada, Johan Lauwereyns
- P41 Reactivation hypothesis in episodic memory: From the findings of neuroimaging studies. *Aya Ueno, Jiro Okuda, Toshikatsu Fujii*
- P42 Model-based analysis of functional connectivity during associative learning in schizophrenia. *Mihaly Banyai, Vaibhav Diwadkar, Peter Erdi*
- P43 Neuronal activity in the prefrontal cortex during performance of a dual task consisting of a main- and an interrupting-task.
Atsushi Miyazaki, Toshi Nakajima, Keisetsu Shima, Hajime Mushiake
- P44 Functional analysis of the hippocampus using opto-fMRI. *Yoshihumi Abe, Masaki Sekino, Yugo Fukazawa, Hiromu Yawo, Hiroyuki Ohsaki, Tatsuhiko Hisatsune.*
- P45 Modulation of cortio-hippocampal EEG synchronization with visual flicker: A theoretical study. *Naoyuki Sato*
- P46 Transition of firing patterns in a CA1 pyramidal neuron model.
Dan Ma, Shenquan Liu, Lei Wang.
- P47 The effects of leakage conductance on firing properties in a compartment neuron model. *Lei Wang, Shenquan Liu.*
- P48 Numerical analysis of parkinson's disease in a basal ganglia network model.
Xiaofeng Xie, Shenquan Liu, Xuemiao Pan, Wang Lei