

Nishinomiya-Yukawa International & Interdisciplinary Symposium 2007

What is Life?

*The Next 100 Years of
Yukawa's Dream*

October
15 (Mon) ~ 20 (Sat)
2007
CO-OP Inn Kyoto
Conference Hall



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Invited Speakers

Robert Arking (Wayne State Univ.)
Carl Becker (Kyoto Univ.)
David Deamer (U.C.Santa Cruz)
John Evans (England)
Luciano Floridi (Univ. of Oxford)
Susumu Goto (Kyoto Univ.)
Nicholas Humphrey (London Univ.)
Masami Ishido (Nat. Inst. Env.)
Akio Kanai (Keio Univ.)
Seunghwan Kim (APCTP)
Hajime Kimata (Moriguchi-Keijinkai Hospital)
Saburo Matsui (Kyoto Univ.)
Tetsuro Matsuzawa (Kyoto Univ.)
Nobuhiro Minaka (NIAES)
Kiyoshi Miyagawa (Univ. of Tokyo)
Yoshihiro Miyake (Tokyo Inst. Tech.)
Alex Mogilner (U.C.Davis)
Aage R. Møller (Univ. of Texas, Dallas)
Vidyanand Nanjundiah (IISc, Bangalore)
Yoshiaki Omura (New York Medical College)
Kuniaki Otsuka (Tokyo Women College Med.)
Donald W. Pfaff (Rockefeller Univ.)
Raphael Pinaud (Univ. of Rochester)
Rudy Rucker (U.S.)
Leif. G. Salford (Lund Univ.)
Mitsuhiko Shionoya (Univ. of Tokyo)
Gentaro Taga (Univ. of Tokyo)
Junji Takabayashi (Kyoto Univ.)
Hiroyuki Takeda (Univ. of Tokyo)
Naoko Tosa (Kyoto Univ.)
Mark van Atten (CNRS, Paris)
Toshio Yanagida (Osaka Univ.)
Motohiro Yoritomi (Shuchiin Univ.)

Call for Papers in Poster Session
Deadline : June 30 (Sat) 2007

Yukawa Institute for Theoretical Physics, Kyoto University

<http://www2.yukawa.kyoto-u.ac.jp/~ny2007/> e-mail: ny2007@yukawa.kyoto-u.ac.jp

Mandara in the background : reproduced by permission from Tō-ji Temple in Kyoto



	10/15(Mon)	10/16(Tue)	10/17Wed)	10/18(Thu)	10/19(Fri)	10/20(Sat)
	S.Nara M. Murase <i>Kyoto Univ.</i> Opening address	K. Kaneko Seunghwan Kim <i>APCTP</i> A few problems on functional self-organization in brain	K. Kato Kunihiro Kaneko <i>Univ. Tokyo</i> Consistency principle in biological dynamical system: Plasticity, robustness, and genotype-phenotype relationship*	Y. P. Gunji Susumu Goto <i>Kyoto Univ.</i> Network perspective in bioinformatics	I. Tsuda Toshio Yokoyama <i>Kyoto Univ.</i>	Y. P. Gunji Saburo Matsui <i>Kyoto Univ.</i> Faith Ethics for Sustainable Development
9:00 9:15	Nobuhiro Minaka <i>NIAES</i> Historical reasoning and abductive inference in phylogenetic reconstruction			Kiyoshi Miyagawa <i>Univ. Tokyo</i> Radiation and anti-cancer drug: How to cope with DNA damage?	9:00 9:20	
9:15 10:00				9:20 10:20	Aage R.Moller <i>Univ. Texas</i> Plasticity of the brain: For good and bad*	9:00 9:40
	S.Nara Alex Mogilner <i>U. C. Davis</i> Sorting of polar filaments by multiple motor action	H. Kook I. Tsuda, Y. Yamaguti, S. Kuroda, Y. Fukushima and M. Tsukada <i>Hokkaido Univ</i> A mathematical model for the hippocampus: towards the understanding of episodic memory and imagination*	K. Kato Hiroyuki Takeda <i>Univ. Tokyo</i> Coupled oscillators in vertebrate segmentation	D. Deamer Akio Kanai <i>Keio Univ.</i> Importance of periodicity in the genetic information and a new hypothesis of the tRNA evolution*	A. Kanai David Deamer <i>U. C. Santa Cruz</i> Self-assembly processes in the prebiotic environment	R. Pinaud Donald W. Pfaff <i>Rockefeller Univ.</i> The central neural foundations of awareness and self-awareness*
10:15 11:15				10:35 11:35		
11:30 12:30	Toshio Yanagida <i>Osaka Univ.</i> Single molecule study for elucidating the mechanism involved in utilizing fluctuations by biosystems	A. R. Moller Tsutomu Murata <i>ICT, Brain Proj.</i> Creativity and Consciousness of the Human Brain	K. Kato Vidyayanand Nanjundiah <i>Indian Institute of Science</i> How important is genetic relatedness for social behaviour?	R. Rucker Mark van Atten <i>CNRS, Paris</i> The foundations of mathematics as a study of life*	Y. Takagi Robert Arking <i>Wayne State Univ.</i> Why and how we age, and is that process modifiable?*	K. Nishimura Naoko Tosa <i>Kyoto Univ.</i> Computing of Japanese Culture
14:45 15:45	S. Kim Yukio-Pegio Gunji <i>Kobe Univ.</i> A minimal cell model showing both amoeboid movement and network formation!*	Poster Session L. Salford John Evans <i>Cambridge University</i> Vertebrate growth and form: A whole-body approach	Free time	C. Becker Motohiro Yoritomi <i>Shuchin Univ.</i> The multiple implications and functions in Mandalas*	13:30 14:10	J. Evans Masami Ishido <i>Nat. Inst. Env.</i> The modification of biocellular chemical reactions by physico-chemical stimulants in the environment
15:45 16:00				14:15 15:15	14:20 15:20	Leif G. Salford <i>Lund Univ.</i> The mammalian brain in the electromagnetic fields designed by man*
16:00 17:00	R. Arking Luciano Floridi <i>Oxford Univ.</i> What is bioinformation?	K. Yoshimura Yoshiaki Omura, MD, ScD <i>New York Medical College</i> Non-invasive quick diagnosis and safe & effective treatment of intractable medical problems: Anti-aging and anti-cancer	T. Murata Mitsuhiko Shionoya <i>Univ. Tokyo</i> Nanoscopic Molecular Architectures in Supra-molecular Science	16:15-17:15 S. Tsokolov Franz Halberg <i>University of Minnesota</i> Life's waves in space-time in and around us	A. Mogilner Junji Takabayashi <i>Kyoto Univ.</i> Leaf volatile ecology: multitrophic interaction networks mediated by leaf volatiles*	V. Narjundiah Carl Becker <i>Kyoto Univ.</i> Life from the Outside/Life from the Inside*
17:30 18:30	K. Kaneko Raphael Pinaud <i>Univ. of Rochester</i> Neural basis of vocal communication in songbirds*	Y. Miyake Kuniaki Otsuka <i>Tokyo Women College Med.</i> Biological clocks in the life and its clinical use	M. van Atten Rudy Rucker <i>San Jose State University</i> Life as a gnarly computation	T. Hondou Hajime Kimata <i>Moriguchi-Keijinkai Hospital</i> Environmental stress and atopic dermatitis: Cure with steroid-free treatment and mutual trust*	D. W. Pfaff Nicholas Humphrey <i>London Univ.</i> The necessity of consciousness. Why human zombies would be an evolutionary dead end.	S. Tsokolov Tetsuro Matsuzawa <i>Kyoto Univ.</i> Chimpanzee mind: The evolutionary basis of human mind*
18:45 21:00	Reception				18:45 21:00	Reception Masatoshi Murase <i>Kyoto Univ.</i> Closing address
	20:00 20:45	Y. Miyake Gentaro Taga <i>Univ. Tokyo</i> Being and Becoming Human: A dynamical systems perspective on development of brain and behavior*	K. Ebina Yoshihiro Miyake <i>Tokyo Inst. Tech.</i> Co-creation of presence and its application to human interface*	S. Tanaka Shoji Itakura <i>Kyoto Univ.</i> Understanding other's mind: Approach from the Developmental Cybernetics		