Applications of Renormalization Group Methods in Mathematical Sciences

Symposium at RIMS of Kyoto University

We invite you to the following symposium to be held at the Res. Inst. of Math. Sci of Kyoto University.

Organizer K.R.Ito (Setsunan Univ.) Co-organizer F. Hiroshima (Kyushu Univ.)

Date 2007 Sept. 12(Wed) 11:30 ~ Sept. 14(Fri) 16:50 Place Room No. 115 of RIMS, Kyoto Univ., Sakyo-ku, 606 Kyoto

Programme (August 28, Provisional)

Sept. $12 \pmod{4}$	
11:30-12:20	K.Aoki, T.Kobayashi (Kanazawa Univ.)
	Analysis of 1D Long-Range Interacting Systems by
	Finite Range Scaling
14:00-14:50	V.Rivasseau (Univ. Paris XI)
	Rigorous Noncommutative Renormalization (I)
	Motivations and Overview
15:00-15:50	A.Suzuki, W.Sasaki (Hokkaido Univ.)
	Fermionic Renormalization Group Method Based on the
	Feshbach Map
16:00-16:50	F.Hiroshima (Kyushu Univ.), J. Lorinczi (TUM, Muenchen)
	Functional Integral Representation of the Pauli-Fierz
	Model with Spin $1/2$
Sept. 13 (Thu)	[Morning]
09:30-10:20	S.Watanabe (Gunma Univ.)
	Mathematical Analysis of the BCS-Bogolyubov Theory
10:30-11:20	H.Tamura (Kanazawa Univ.)
	Boson Gas Mean Field Models in Weak Trapping Potentials
	by Means of Random Point Fields
11:30-12:20	Y. Ito (Tokushima Univ.)
	What are happening in the Physics of Electrons, Atoms
	and Molecules? : Physical Reality Revisited

Sept.	13 (Thu.)	[Afternoon]
14:00-14:50	4:50	V.Rivasseau (Univ. Paris XI)
		Rigorous Noncommutative Renormalization (II)
		Scales and Renormalization Group
15:00-1	5:50	T. Yanagisawa (Nara Women's Univ.)
		On the paper "Blows Ups of Complex Solutions of the 3D
		Navier-Stokes System and RG Method" by Ya Sinai et al.
16:00-1	6:50	H. Nakano(Kochi Univ.)
		Recent Topics in the Theory of Random Schroedinger Operators
Sept.	14 (Fri)	
09:30-1	0:20	M. Yoshida (Kansai Univ.), S.Albeverio (Bonn)
		New Renormalization for the Field Operators on
		Constructive QFT by means of the Hida product
10:30-11:20	1:20	H. Chiba (Kyoto Univ.)
		Approximation of Vector Fields on the RG Method and
		its Applications to the Synchronization
11:30-12:20	2:20	T.Nishino (Kobe Univ.)
		Corner Transfer Matrix Renormalization Group Method
		and its Application to the 2D Ising Model
14:00-14:50	4:50	V.Rivasseau (Univ. Paris XI)
		Rigorous Noncommutative Renormalization (III)
		Constructive Approach
15:00-1	5:50	M. Wunsch (Wien Univ & Kyoto Univ.)
		On a One-Parameter Fluid Dynamics Model Equation
16:00-16	6:50	M. Kuze, F.Hiroshima (Kyushu Univ.),
		K.R.Ito (Setsunan Univ.)
		Non-Linear Evolution Equations derived from
		the RG equations of Wegner-Houghton-Aoki type

(1) Abstracts of the lectures and latest changes in the programme are seen in the home page of the symposium: http://www.setsunan.ac.jp/mpg/confs/rims07/renom07.html
(2) A welcome party is planned from 6:00 pm, 13 Sept. (at "Lever son Verre", (French cuisine))