Applications of Renormalization Group Methods in Mathematical Sciences

Symposium at the RIMS of Kyoto University

(2009 Sept. 09 (Wed.)   Sept. 11 (Fri.))

We invite you to the following symposium to be held at the Res.Inst.Math.Sci. of Kyoto University. (Note: Because of the reconstruction of the RIMS building, the symposium will be held at the room No.127 in the building No.3 (Dept. of Math.) of the faculty of science)

organizer   K.R.Ito
(Setsunan Univ.)
co-organizer   T.Miyao
(Setsunan Univ.)

Programme

Sept. 09 (Wed.)

09:30-10:20   K.Hidaka (Kyusu)
On the existence of ground states for the Pauli Fierz model on a pseudo Riemannian manifolds

10:30-11:20   A.Suzuki (Kyushu)
Ground states for the massless Nelson model on a Lorentzian manifold

11:30-12:20   T.Miyao (Setsunan Univ.)
Spectral analysis of the semi-relativistic Pauli-Fierz Hamiltonian

14:00-14:50   T.Hattori (Keio Univ.)
Hydrodynamic limit of move-to-front rule and LRU caching

15:00-15:50   H.Tamura(Kanazawa)
Boson Gas Mean field model trapped by weak harmonic potentials in mesoscopic scaling

16:00-16:50   Y. Ito (Tokushima)
Study on Systems of Hydrogen Atoms in the View Point of Natural Statistical Physics

Sept. 10 (Thu.)

09:30-10:20   M.W.Yoshida (Kansai Univ.), S.Albeverio, M.Röckner
A Universal Consideration on the homogenization problems of infinite dimensional diffusions

10:30-11:20   K.Aoki.T.Kobayashi, Y.Tomita (Kanazawa)
Domain wall renormalization group analysis of 2-dimensional square lattice Ising model

Sept. 10 (Thu.)   (Continued)

11:30-12:20   T.Chen (Univ. Texas at Austin)

Charge transport in Random Media and   Boltzmann limits for the single particle and manybody model (I)

14:00-14:50   T.Chen (Univ. Texas at Austin)

Charge transport in Random Media and   Boltzmann limits for the single particle and manybody model (II)

15:00-15:50   Y.Ogata (Tokyo)

Large Deviations in Quantum Spin Systems

16:00-16:50   A.Sakai (Hokkaido)

Asymptotic Behavior of the gyration radius for long-range oriented percolations and long-range self-avoiding walks

Sept 11 (Fri.)

9:30-10:20   W.Sasaki (Shinshu)

Existence of Ground State in some semi-relativistic Quantum Field Models

10:30-11:20   H.Chiba (Kyoto Univ.)

Stability theory for the infinite dimensional Kuramoto-Daido model

11:30-12:20   T.Miyaji (Hiroshima)

Stability and Bifurcation Analysis to dissipative cavity solitons of Lugiato-Lefever eq. in 1D bounded interval

14:00-14:50   T.Chen (Univ. Texas at Austin)

Charge transport in Random Media and Bolzmann limits for the single particle and manybody model (III)

15:00-15:50   Y.Takahashi (Kyoto Univ.)

Poissonian Fock Space, Gibbs measures and Fermion(determinantal) processes revisited

16:00-16:50   K.R.Ito (Setsunan), E.Seiler (Munich)

New and old unsolved problems in mathematical physics and renormalization group methods

(1) Abstracts of lectures and the latest changes of the programme
are seen at the home page of the symposium
http://www.setsunan.ac.jp/mpg/confs/rims09/renom09.html
(2) Welcome party : 10 Sept., from 6:00 pm
   at Lever son Verre (French) 6,000 yen (half price for students)
(3) dead line for the contrinution to the proceedings: December 31, 2009