COE International Symposium
Exploring New Science by Bridging Particle-Matter Hierarchy

March 5 (Fri) – March 7 (Sun), 2004

Multimedia Education and Research Building (Kawauchi-North Campus of Tohoku University)
PROGRAM

March 5 (Friday), 2004

10:00-10:40 A. Suzuki
   The 21st Century COE Program: Exploring New Science by Bridging Particle-Matter Hierarchy

10:40-11:00 Coffee Break

Chairperson: Y. Shibata

11:00-12:10 H. Amann
   Coagulation-Fragmentation Models

12:10-13:30 Lunch

Chairperson: T. Fujita

13:30-14:00 T. Kawakatsu
   Dynamical Self-Consistent Field Theory for Inhomogeneous Dense Polymer Systems -- Bridging between Microscopic Chain Structures and Dynamics of Mesoscopic Domains --

14:00-14:30 D. D. Sarma
   Semiconducting Nanoparticles: Flexible Properties out of Tunable Sizes

14:30-15:00 Y. Murakami
   Orbital Ordering Studied by Resonant X-Ray Scattering

15:00-15:30 T. Takahashi
   Bogoliubov Quasiparticle in High-Tc Superconductors Observed by Angle-Resolved Photoemission Spectroscopy

15:30-15:50 Coffee Break

Chairperson: Y. Nagashima

15:50-16:20 T. Moroi
   Particle Physics, Cosmology, and Supersymmetry

16:20-16:50 T. Buchert
   Cosmological Parameters are 'dressed' -- a Key to Bridging the 'Dark Energy' Gap?

16:50-17:20 Y. Suto
   Weighing the Universe; Baryons, Dark Matter and Dark Energy
March 6 (Saturday), 2004

Chairperson: H. Kamimura

9:30-10:40 M.S. Dresselhaus
Perspectives on Nanoscience

10:40-11:00 Coffee Break

Chairperson: M. Tachiki

11:00-12:10 F. Steglich
Kaleidoscope of Heavy Electrons: Superconductivity, Magnetism, Quantum Critical Points

12:10-13:30 Lunch

Chairperson: N. Kawano

13:30-14:00 M. Kotani
Electron Transfer on a Crystal Lattice with and without Magnetic Field

14:00-14:30 T. Hattori
Renormalization Group Approach to a Generalization of the Law of Iterated Logarithms for One-Dimensional (Non-Markovian) Stochastic Chains

14:30-15:00 D. Chae
On the Multi-string Solutions of the Einstein equations Coupled with the Maxwell-Higgs System

15:00-15:20 Coffee Break

Chairperson: Y. Nagai

15:20-15:50 T. Kobayashi
Nuclear Physics using RI Beams

15:50-16:20 H. Saio
elioseismology and Solar Models

16:20-16:50 J. Shirai
KamLAND: Neutrinos from Reactors to the Earth and the Sun

16:50-17:20 P. Payre
The Antares Neutrino Telescope

18:00- Banquet
(6th floor, Multimedia Education and Research Building)
March 7 (Sunday), 2004

Chairperson: J. Nishimura

9:30-10:40 S. Pakvasa
  *Neutrinos: Yesterday, Today and Tomorrow*

10:40-11:00 Coffee Break

Chairperson: O. Hashimoto

11:00-12:10 L.S. Cardman
  *Nuclear Physics – Nature on the Femtometer Scale*

12:10-12:20 Closing: Y. Kuramoto