

SECOND WORKSHOP
**“ Physics for large and small scale:
from the Planck scale through nano scale to cosmological distances ”**
(Second PLSS)

Nhatrang, 5-6 January 2007

PROGRAM

Friday, 05 Jan. 07

- **Morning: 8:15 – 12:00**

8:15 – 8:45 : Registration.

8:45 – 9:00 : OPENING and common photos.

Session 1: Chairman: John Weiner

9:00 – 9:30 : **Chin-Chun Tsai** (Nat. Cheng-Kung Univ., Tainan, Taiwan)

Precision measurement of the Cs Rydberg states with the splitting of electromagnetically induced transparency.

9:30 – 10:00 : **Seung-Hoon Jhi** (Pohang Univ. of Science and Tech., Pohang, Korea)

Electronic and magnetic properties of carbon nanotubes upon chemically or mechanically-induced symmetry-breaking.

10:00 – 10:30 : Coffee break.

Session 2: Chairman: Seung-Hoon Jhi

10:30 – 11:00 : **Hanchul Kim** (Korea Res. Inst. of Standards and Science, Seoul, Korea)

First-principles study of carbon-induced modification of Si(001).

11:00 – 11:30 : **Ming-Way Lee** (Nat. Chung-Hsin Univ., Taichung, Taiwan)

New technique for studying field emission from individual carbon

11:30 – 11:45 : **Yung-Chau Chen** (Nat. Chung-Hsin Univ., Taichung, Taiwan)

The optical and transport properties in the self-assembled free base porphyrin Crystal.

11:45 – 12:00 : **Nguyen Ngoc Linh** (College of Nat. Scie. , HCMCNU, Ho Chi Minh city, Vietnam)

Molecular dynamics study on structural properties of liquid and morphous $AlO_3.2SiO_2$ nanoparticle.

- **Afternoon: 13:30 – 17:00**

Session 3: Chairman: Tetsuo Deguchi

- 13:30 – 14:00 : **Cai-Dian Lu** (Inst. High Energy Phys., Beijing, China)
Flavor physics and CP violation.
- 14:00 – 14:30 : **Vittorio Del Duca** (INFN, Frascati, Italy)
Higgs: the missing link of the standard model.
- 14:30 – 15:00 : **Chuan-Jie Zhu** (Inst. Theor. Phys., Beijing, China)
QCD calculation for LHC.
- 15:00 – 15:30 : Coffee break.

Session 4: Chairman: Chuan-Jie Zhu

- 15:30 – 16:00 : **Tetsuo Deguchi** (Ochanomizu Univ., Tokyo, Japan)
Onsager algebra and superintegrable chiral Potts model: duality of lattice models through $sl(2)$ loop algebra symmetry at roots of unity.
- 16:00 – 16:30 : **Choo Hiap Oh** (Nat. Univ. of Singapore, Singapore)
Bell 's inequality and its generalizations.
- 16:30 – 17:00 : **Chia-Chu Chen** (Nat. Cheng-Kung Univ., Tainan, Taiwan)
Gauge invariance and ground state instability in Dicke model.

Saturday, 06 Jan. 07

- **Morning: 8:30 – 12:00**

Session 5: Chairman: Ming-Way Lee

- 8:30 – 9:00 : **Yunkyu Bang** (Chonnam Nat. Univ., Kwangju, Korea)
Theory of unconventional superconductors.
- 9:00 – 9:30 : **John Weiner** (Univ. Paul Sabatier, Orsay, France)
The nature of surface waves on subwavelength metallic structures.
- 9:30 – 10:00 : **Eric Yang** (Seoul Nat. Univ. , Seoul, Korea)
Control of single and many electron states in semiconductor quantum dots by non-Abelian vector potentials.
- 10:00 – 10:30 : Coffee break.

Session 6: Chairman: Yunkyu Bang

- 10:30 – 11:00 : **Jongbae Hong** (Seoul Nat. Univ., Seoul, Korea)
Understanding of nonequilibrium Kondo phenomena by nonperturbative dynamical theory.
- 11:00 – 11:30 : **Tran Minh Tien** (Inst. Phys. & Elect., Hanoi, Vietnam)
Inhomogeneous phases in correlated electron materials.

11:30 – 11:45 : **Nguyen Ha Hung Chuong** (College of Nat. Scie., HCMCNU, Ho Chi Minh city, Vietnam)
Study of linear resistivity near vortex glass transition in three dimensional lattice XYZ model.

11:45 – 12:00 : **Nguyen Tuan Anh** (College of Nat. Scie., HCMCNU, Ho Chi Minh city, Vietnam)
Spontaneous decay of an excited atom placed near a rectangular plate.

- **Afternoon: 13:30 – 16:00**

Session 7: Chairman: Choo Hiap Oh

13:30 – 14:00: **N. D. Hari Dass** (Hayama Centre for Advanced Studies, Hayama, Japan)
Effective string theories.

14:00 – 14:30: **Yi Yang** (Nat. Centre for Theoretical Sciences, Hsinchu, Taiwan)
Symmetries in string theory and string scattering amplitudes.

14:30 – 14:45: **Dinh Nguyen Dinh** (Inst. Phys. & Elect., Hanoi, Vietnam)
On the covariant calculation of super-graphs in harmonic superspace.

14:45 – 15:00: Coffee break.

15:00 – 15:30: **Nguyen Quynh Lan** (Hanoi Nat. Univ. Education, Hanoi, Vietnam)
Late decaying dark matter, bulk viscosity and the cosmic acceleration.

15:30 – 16:00: **Pham Quang Hung** (Univ. Virginia , Charlottesville, Virginia, USA)
Inflation, dark energy and the false vacuum.

16:00 – 16:30: FINAL DISCUSSIONS.