

5th International Symposium on Quantum Optics

Day-1 (Tuesday Aug 03, 2010)

- 09:00 – 09:15 **Registration**
09:15 – 09:30 **Welcoming remarks**

Session I

Chairman: Dr. Sajid Qamar

- 09:30 – 10:15 M. Suhail Zubairy, Texas A&M University, Texas, USA
Sub-wavelength lithography
- 10:15 – 11:00 Shi-Yao Zhu, Hong Kong Baptist University, Hong Kong, China
Quantum interference in spontaneous emission: the role of Lamb shift
- 11:00 – 11:30 **Tea break**

Session II

Chairman: Dr. Faheel Hashmi

- 11:30 – 12:15 Jiangrui Gao, Shanxi University, Shanxi, China
Quantum correlation in optical parametric process
- 12:15 – 12:35 Masroor Ikram, PIEAS, Islamabad, Pakistan.
Interferometers for precision measurement of angle and axis of rotation
- 12:35 – 14:00 **Lunch break**

Session III

Chairman: Dr. Farhan Saif

- 14:00 – 14:20 Shahid Qamar, PIEAS, Islamabad, Pakistan.
Velocity selection for ultra-cold atoms using maser
- 14:20 – 14:40 Sabieh Anwar, LUMS, Lahore, Pakistan
Photons for the undergraduate
- 14:40 – 15:00 Sajid Qamar, CQP, CIIT, Islamabad, Pakistan
Atomic microscopy via two photon spontaneous emission spectroscopy
- 15:00 – 15:20 Manzoor Ikram, CQP, CIIT, Islamabad, Pakistan
Gaussian state entanglement in quantum beat laser
- 15:20 – 15:50 **Tea break**

Session IV

Chairman: Dr. Fazal Ghafoor

- 15:50 – 16:10 Faheel Hashmi, CQP, CIIT, Islamabad, Pakistan
Phase control of transition probability in a two-level atom
- 16:10 – 16:30 Rabia Tahira, CQP, CIIT, Islamabad, Pakistan
Entanglement dynamics of two-qubit systems in thermal environment
- 16:30 – 16:50 Zia-ud-din, CQP, CIIT, Islamabad, Pakistan
Control of Goos Hanchen shift in gain media
- 16:50 – 17:10 M. Aslam Khan, PU, Lahore, Pakistan
Electromagnetically induced transparency in F=1 to 1 atomic system

Day-2 (Wednesday Aug 04, 2010)

Session I

Chairman: Dr. Shahid Qamar

- 09:30 – 10:15 Fuli Li, Xi'an Jiaotong University, Xi'an, China
Controlling optical properties of atomic gases via atomic coherence
- 10:15 – 11:00 Hong Guo, Peking University, Beijing, China
Two key techniques for the security of QKD system, truly random generator and passive scheme of source monitoring
- 11:00 – 11:30 **Tea break**

Session II

Chairman: Dr. Ashfaq Hussain Khosa

- 11:30 – 12:15 Jianwei Zhang, Peking University, Beijing, China
On the generator of high rate QRN
- 12:15 – 12:35 Hongxin Zou, National University of Defense Technology, Changsha, China
CV-QKD with coherent state and quantum random number generator
- 12:35 – 14:00 **Lunch break**

Session III

Chairman: Dr. Tasnim Azim

- 14:00 – 14:20 Farhan Saif, QAU, Islamabad, Pakistan.
Stability, bi-stability and randomness in single mode lasers
- 14:20 – 14:40 Mazhar Ali, CIIT, Abbottabad, Pakistan
Quantum discord for two-qubit X-states
- 14:40 – 15:00 Afaq Ahmad, PU, Lahore, Pakistan
Electron flux oscillations in photo detachment of a nonlinear triatomic anions
- 15:00 – 15:20 Ashfaq H. Khosa, CQP, CIIT, Islamabad, Pakistan
Quantum Zeno effect without RWA under the influence of non-classical states of light
- 15:20 – 15:50 **Tea break**

Session IV

Chairman: Dr. Manzoor Ikram

- 16:50 – 16:10 Fazal Ghafoor, CQP, CIIT, Islamabad, Pakistan
The effect of decoherence on atom localization
- 16:10 – 16:30 Mahmood Irtiza Hussain, CQP, CIIT, Islamabad, Pakistan
Delaying entanglement sudden death in bipartite systems
- 16:30 – 16:50 Syed Hammad H. Bukhari, CIIT, Lahore, Pakistan
Non-classicality and quantum entanglement of superposition of coherent states
- 16:50 Concluding remarks