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NOTICE

Prof. Anil K. Pradhan and Prof. Sultana Nahar from Ohio State University (USA) will deliver a 4 week lecture course on “Atomic and Molecular Radiation Physics: Astronomy to Biomedicine” from Feb. 10 – March 8, 2014 on the following schedule:

- Time: 3:00 p.m -5:00 p.m. (Days: Monday, Tuesday, Wednesday)
- Venue: Lecture Hall No. 71, Department of Physics & Astrophysics, D.U.
- Textbook: “Atomic Astrophysics and Spectroscopy” Anil K. Pradhan and Sultana N.Nahar (Cambridge, 2011)

Week 1 (Feb. 10, 11, 12): AMO Physics and the Universe

- Light and Matter
- Plasma Sources
- Particle and Photon Distributions
- Atomic Structure: Hydrogenic and Non-hydrogenic Spectra

Week 2 (Feb. 17, 18, 19): Theory and Computational Laboratory:

- Multi-electron Systems
- Hartee-Fock Approximation
- Dirac Equation and Breit-Pauli Approximation

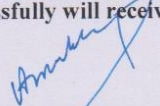
Week 3 (Feb. 24, 25, 26): Atomic Processes:

- Radiative Transitions
- Excitation and Ionization
- Photoionization and Recombination
- Coupled Channel Approximation: R-Matrix Method

Week 4 (March 3, 4, 5): Applications:

- Capacity Project, Iron Project, Databases
- High-Energy-Density Fusion and Laser Plasmas
- Molecular Structure and Spectra
- Nanophysics and Biomedicine

All are welcome. However, it will help us if interested persons register by sending their name, institution, email address and contact phone nos. to head.physics.du@gmail.com, & cc to drmanmohan.05@gmail.com. Those who complete the course successfully will receive a certificates from the Department.


(Prof. A. Mukherjee)
Head of the Department