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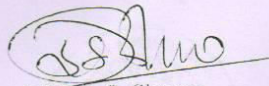
Summary about TEQIP Workshop on 'Mechanics in Physics'
at IIT, Kanpur during June 23-27, 2014

the proposed workshop 'Mechanics in Physics'. they identified one particular topic: mechanics. Broadly, it covered Newtonian, quantum and relativistic mechanics. It is well-acknowledged that these topics are very subtle and constitute the very basic building blocks of any other topic in physics. The workshop provided me the opportunity to discuss the contemporary aspects of teaching mechanics in a Physics course. I realized through model lectures by experts on how to squeeze maximum juice out of a topic that might look dry outwardly. There were model tutorial-sessions and discussions on model homework/exam problems that could be used to propel the course in a uniform pace without sacrificing lecture-hours.

In addition to understanding what is the contemporary take on centuries-old Newtonian mechanics, one of the key highlights of the workshop was the seminars by experienced experts on how to do the difficult job of making transition from Newtonian mechanics to quantum mechanics and relativistic mechanics in a classroom. In this workshop, the followings were the topics discussed in the detail: Conserved quantities, Frames of reference, Dimensional analysis, System of particles, Oscillators, Angular Momentum, Lorentz Transformations, Relativistic Kinematics, Schrodinger equation, Uncertainty Principle, Particle in a Box, Simple harmonic Oscillator and Hydrogen Atom.

List of invited speakers:

- Dr. Jayanta Kumar Bhattacharjee, IIT Allahabad
- Dr. Kaushik Bhattacharya, IIT Kanpur
- Dr. Sagar Chakraborty, IIT Kanpur
- Dr. Saikat Ghosh, IIT Kanpur
- Dr. K., Srinivasan, Toronto University, Japan
- Dr. Tapobrata Sarkar, IIT Kanpur
- Dr. Mahendra Kumar Verma, IIT Kanpur


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