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Workshop on Selected Topics in  
**Casimir Effect:**  
from Nanoscience to High Energy Physics

**25 July 2010 (3 Mordad 1389)**  
School of Physics, IPM, Tehran



*From nanoscience to high energy physics, fluctuation-induced phenomena and the celebrated Casimir effect have been recognized as an important mechanism underlying some of the most striking features of the physical world. This one-day workshop will cover some of the basic concepts and methods as well as a selection of recent research topics studied in the field of fluctuation-induced phenomena. The lectures are aimed at graduate students and research postdocs and may be useful for advanced undergraduate students as well.*

**Topics:**

- Zero-point energy and vacuum fluctuations
- Lifshitz interactions at finite temperature
- Casimir nano-machines
- Fluctuation-induced effects in disordered media
- Casimir effect in soft matter & biological systems
- Casimir effect in noncommutative field theories

**Speakers:**

R. Asgari (IPM)  
M. Faez Miri (University of Tehran)  
A. Naji (University of Cambridge)  
J. Sarabadani (University of Isfahan)  
M.M. Sheikh-Jabbari (IPM)

**Organizers:**

A. Naji (University of Cambridge)  
R. Asgari (IPM)