## Physics Colloquium TODAY!

"Quantum Optomechanics" – Prof. Markus Aspelmeyer, U. Vienna

Massive mechanical objects are now becoming available as new systems for quantum science. Recent experiments, including laser-cooling of micro- and nanomechanical resonators into their quantum ground state of motion, provide the primary building blocks for full quantum optical control of mechanics, i.e., quantum optomechanics. This new frontier opens fascinating perspectives both for various applications and for unique tests of the foundations of quantum theory, for example table-top experiments exploring the interface between quantum physics and gravity.

• 4 pm, 141 Loomis

## Special (Optional) Lecture

"Quantum Information"

- One of the most modern applications of QM
  - quantum computing
  - quantum communication cryptography, teleportation
  - quantum metrology
- Prof. Kwiat will give a special 214-level lecture on this topic
  - Sunday, Feb. 24
  - 3 pm, 141 Loomis
- Attendance is optional, but encouraged.