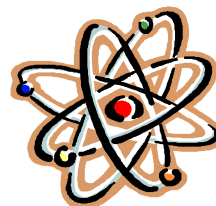


# Seminars



## PHYSICS COLLOQUIUM

**Paul Jager**

**UW Bioengineering**

“Stumbling into microfluidics along the road to point-of-care medical diagnostics”

**Monday, February 4, 2008**

4:00 PM, Ronald Geballe Auditorium, Rm. A-102

***February 4-8, 2008***

Abstract: For the last 15 years many of us have been working to decentralize medical testing in the way that computing has been decentralized since the 1950s. The primary aim has been to develop small inexpensive widgets capable of measuring the concentrations of molecules of medical importance in small volumes of biological fluids. For years we focused on developing the fluidic equivalent of elementary electronic components, and therein rediscovered the richness of life at low Reynolds numbers. We also have been developing optically-based assays for molecular binding that are rapid, multiplexable, and that could be implemented inexpensively; major efforts have been based on absorption, fluorescence and surface plasmon resonance imaging. Today, under funding from organizations like NIH and the Bill & Melinda Gates Foundation, we are doing our first full systems integration. Ironically, we may soon be able to bring revolutionary new types of diagnostic capabilities first into the hands of those providing medical care to the poorest people in the world.

**Tuesday, February 5**

**Particle Theory Seminar**

2:30 PM, Rm. C-421, PAT

Tom Degrand, Univ. of Colorado at Boulder

“An expedition to the epsilon-regime of QCD”

**Condensed Matter Seminar**

4:00 PM, Rm. C-421, PAT

Mike Brown, UW ESS

“Pressure induced high spin to low spin transition in MgO w/6% Fe”

**Thursday, February 7**

**Astronomy Colloquium**

4:00 PM, Rm. A-102, PAA

Bhuvnesh Jain, University of Pennsylvania

“Observational Tests of Modified Gravity”