

## PHYSICS COLLOQUIUM

Partially funded by the GSFEI

James Anglin  
MIT

### “SPINNING BEC”

**Monday, February 9, 2004**

4:00 P.M., Ronald Geballe Auditorium, A-102, PAA  
Reception at 3:45 P.M. in the lobby

**Abstract:** There is an awful lot of physics in making condensates rotate. Topology and catastrophe theory, analogies from nuclear and high energy physics, and comparisons with superfluids and superconductors are all involved in understanding contemporary experiments on ultracold gases. And prospects for the not-too-distant future range from quantum Hall to Hawking effects. But when these sophisticated concepts are expressed in the simple world of the dilute gas, they are brought down to earth. And this can lead us toward new insights into basic questions.

**Tuesday, February 10, 2004**

**Condensed Matter Seminar**  
4:00 P.M., Rm. C-421, PAT

Stuart Solin, Washington U, Physics  
TBA

**Particle Theory Seminar**  
2:30 P.M., Rm. C-421, PAT

Dam Thanh Son (UW)  
“DYNAMIC UNIVERSALITY CLASS OF THE QCD CRITICAL POINT”

**Thursday, February 12, 2004**

**Astronomy Colloquium**  
4:00 P.M., Rm. A-102, PAA

TBA

**EPE Seminar**  
4:00 P.M., Rm. C-421, PAT

Andy Haas  
“LATEST RESULTS FROM HIGGS SEARCHES AT DZERO”

**Special Staffing Colloquium**  
4:00 P.M., Rm. C-520, PAT

Dr. Kenneth O'Hara, NIST-Gaithersburg (staffing candidate)  
“A NEW PLAYGROUND FOR MANY-BODY PHYSICS:  
STRONGLY-CORRELATED ATOMIC GASES”

**Friday, February 13, 2004**

**General Examination**  
10:00 A.M., Rm. C-520, PAT

Claire Cramer  
“PROSPECTS FOR AN OPTICAL FREQUENCY STANDARD ON THE  
1S0 - 3P0 TRANSITION IN ATOMIC YB”

**Particle Theory Seminar**  
12:30 A.M., Rm. B-042, PAB

Tim Stelzer (U. Illinois, Urbana)  
“MADEVENT: AUTOMATIC TREE-LEVEL FEYNMAN DIAGRAM,  
HELICITY AMPLITUDE AND EVENT GENERATION”

**Particle Astrophysics Seminar**  
3:30 P.M., Rm. A-110, PAA

TBA

**Atomic Physics Seminar**  
1:30 P.M., Rm. C-520, PAT

Dr. Kenneth O'Hara, NIST-Gaithersburg (staffing candidate)  
“SUPERFLUID-TO-MOTT-INSULATING TRANSITION IN A 1D BOSE  
GAS”

**SEMINARS**  
**February 9-13, 2004**