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## **WEEKLY CALENDAR**

**March 8, 2010**

### **Departmental Colloquium**

**"Optimal quantum memory with atomic ensembles"**

**3:40 PM, March 11, 2010  
109 Nicholson Hall**

**Irina Novikova  
William and Mary College**

**Host: Jonathan Dowling**

**• Refreshments served at 3:15 PM in 232 (Library) Nicholson Hall •**

Efficient and reliable quantum communication will require the control of the quantum state of individual photons. As a step toward this objective, we have demonstrated promising techniques to optimize the performance of quantum memory based on a dynamic form of electromagnetically induced transparency, and allows optimally and reversibly map arbitrary pulses of light onto an ensemble of warm Rubidium atoms. Our techniques, demonstrated in atomic vapor, are applicable to a wide range of systems and protocols.

### **Special Colloquium**

**"Searches for gravitational waves"**

**12:00 PM, March 12, 2010  
435 Nicholson Hall**

**Maria Alessandra Papa  
Max Planck Institute for Gravitational Physics**

**Host: Michael Cherry**

In this talk I will present some recent results from the operating gravitational wave detectors and outline some of the search strategies. In particular I will focus on the area of my research interests which is the detection of continuous gravitational waves.

### **Congratulations To:**

Jorge Pullin who has been appointed to the Advisory Panel of the journal Classical and Quantum Gravity of the Institute of Physics (UK). The advisory panel is composed of 20 high caliber researchers from around the world and will provide advice to the journal on fast track communications and other high priority research papers in order for the journal to apply the highest possible quality standards.

### **Publications:**

"Crystal growth, structure, and physical properties of  $\text{Ln}(\text{Cu}, \text{Al})_{12}$  ( $\text{Ln} = \text{Y}, \text{Ce}, \text{Pr}, \text{Sm}, \text{and Yb}$ ) and  $\text{Ln}(\text{Cu}, \text{Ga})_{12}$  ( $\text{Ln} = \text{Y}, \text{Gd-Er}, \text{and Yb}$ )," Brenton L Drake, C Capan, Jung Young Cho, Y Nambu, K. Kuga, YM Xiong, A B Karki, S Nakatsuji, **PW Adams, D P Young**, and Julia Y Chan, J. Phys.: Condens. Matter 22, 066001 (2010).