

**TUESDAY, MAR. 20, 2001**  
**RM 113 MacNAUGHTON BLDG.**  
**UNIVERSITY OF GUELPH**  
**4:00 p.m.**

**Canadian Association of Physicists (CAP)**  
**Undergraduate Lecture**

**PROF. KENNETH J. RAGAN**

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*McGill University*

**GROUND-BASED GAMMA-RAY ASTROPHYSICS**

*The field of high-energy gamma-ray astrophysics has been revolutionized over the last ten years by both satellite and ground-based instruments. These have discovered that the sky in the GeV energy range is a busy place indeed, with hundreds of sources including pulsars, supernova remnants, and black-hole-driven active galactic nuclei. At the TeV energy scale, however, most of these sources are no longer visible; new instruments are necessary to 'close the gap' between the GeV and TeV regimes and to understand and study these sources. Here we will discuss the science motivations, the current status of the field and the status of these new instruments, including the Solar Tower Atmospheric Cherenkov Effect Experiment (STACEE) which uses the mirrors of a solar power facility to capture the Cherenkov radiation from high energy gamma rays.*

**COFFEE WILL BE AVAILABLE PRIOR TO THE COLLOQUIUM**

**A Reception held in the Grad Student Lounge**  
**5<sup>th</sup> Floor UC, Rm. 530, will follow.**