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Faculty of Science presents:

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# MACafé *Scientifique*

## Nuclear Winter: The Science & Fiction of Radiation



Over the years, we have heard that radon gas in basements causes lung cancer, that fallout from bomb testing mutates babies, and that exploding reactors such as Chernobyl contaminate the world, destroy wildlife and kill hundreds of thousands of people. On the other hand, Canada has the world's largest supply of uranium and the CANDU reactor has a proven track record for energy efficiency, environmental cleanliness, and safety. Surplus energy means prosperity prosperity means a healthy lifestyle and a clean environment. So, why aren't we in Canada enjoying a surplus energy supply and profiting from selling our power internationally? We think the answer is RADIOPHOBIA. People don't understand the biological effects of radiation, so radiation creates fear. Join us for a lively discussion of the science and fiction behind the statements that lead to radiophobia.

### Questions for discussion include:

- Do we need nuclear power?
- How much and what type of radioactive contamination does a reactor normally produce?
- What kind of contamination was released during Chernobyl and how widespread was it?
- What does the United Nations say are the known health consequences of Chernobyl?
- How much radiation is too much radiation?
- Is all exposure to radiation bad?
- How much can we be prepared to accept financially, environmentally, and biologically before we might accept nuclear power?

Please join us at the next McMaster Café for this discussion with guest speakers:

**Fiona McNeill and Doug Boreham**

**Medical Physics & Applied Radiation Sciences,  
McMaster University**

**Wednesday Nov. 23, 2005**

**The Tap Haus Bar & Grill**

988 King St. West, 905-527-3535

**5:30 p.m.**



**Café Scientifique** is a discussion forum in an informal setting that gives people an opportunity to discuss a variety of topics in science.

Café Scientifique is not a lecture series; it is an opportunity for a group discussion, where involvement from the audience is an important ingredient.

