



# Department of Physics Colloquium

Wednesday, April 2nd, at 4:00 p.m. / SH 121

Pre-Colloquium at 3:30 p.m. / SH 108

## How to Use Ionizing Radiation as a Cancer Vaccine?

**Hint: DNA Damage**

**Speaker: Gabriel Sawakuchi**

### **Abstract:**

Many cancers are resistant to treatments including immunotherapy. These so called immunologically cold cancers have mechanisms to evade or suppress immune-mediated cancer cell killing. Ionizing radiation induces DNA damage which in turn can stimulate the immune system towards an antitumor immune response. This talk will focus on how ionizing radiation could be used as a vaccine to stimulate an antitumor immune response to turn immunologically cold cancers responsive to immunotherapy.

