

QUEBEC CITY  
**May 27 - June 6, 2012**

# FRONTIERS IN NEUROPHOTONICS

An International Summer School on Advanced Imaging and Photoactivation Techniques

*Frontiers in Neurophotonics* combines tutorials given by experts in photonics and neuroscience and hands-on experiments involving advanced optical approaches to measure, manipulate and follow molecular events in living neuronal cells.

## Topics to be covered include:

- Tracking cell migration and maturation in live brain slices
- Video-rate multimodal imaging in vivo
- Coherent Anti-stokes Raman Scattering microscopy
- Imaging protein trafficking in and out of synapses
- Single molecule imaging
- Fluorescence lifetime approaches
- Photoactivation techniques
- Two-photon calcium imaging in axons and dendrites
- Random-access two-photons microscopy
- Super-resolution imaging
- In-vivo optogenetics

## Speakers

**Antoine Adamantidis** (McGill Univ., Montreal, Canada)

**George Augustine** (Duke Univ., Durham, USA)

**Thomas Blanpied** (Univ. of Maryland, Baltimore, USA)

**Santiago Costantino** (Univ. of Montreal, Canada)

**Daniel Côté** (Laval Univ., Québec, Canada)

**Paul De Koninck** (Laval Univ., Québec, Canada)

**Yves De Koninck** (Laval Univ., Québec, Canada)

**Stéphane Diudonné** (École Normale Supérieure, Paris)

**Kurt Haas** (Univ. British Columbia, Vancouver, Canada)

**David Kleinfeld** (Univ. of California, San Diego, USA)

**Richard Robitaille** (Univ. of Montreal, Canada)

**Ed Ruthazer** (McGill Univ., Montreal, Canada)

**Lisa Topolnik** (Laval Univ., Québec, Canada)

2011 *Frontiers in Neurophotonics* Summer School



For more information and to apply to the School (deadline March 1st 2012) visit [www.neurophotonics.ca](http://www.neurophotonics.ca)