



Consulat général de France
à Vancouver



University
of Victoria



Alliance Française de Victoria

In partnership with:



UNIVERSITY OF VICTORIA

March 14th, 2016

ECS 125, **5:30 pm - 7pm**

Victoria, BC Canada

Free, by reservation:

invitations.vancouver-fslt@diplomatie.gouv.fr



Prof. Michel LEFEBVRE

*Department of Physics and Astronomy - University of Victoria
Principal Investigator, ATLAS UVic group*

EXPLORATION AT THE LARGE HADRON COLLIDER

The recent discovery of the Higgs boson at the CERN laboratory, near Geneva, is a historic event, shedding more light on our understanding of the Universe.

Since the discovery of the electron more than one hundred years ago, the exploration of the subatomic world has had profound impacts on our lives and on our understanding of the world we live in. This quest continues at the Large Hadron Collider, in effect the most powerful microscope ever built, now allowing physicists, through proton collisions, to boldly look inside matter where no one has looked before.

This presentation will summarize our current understanding of the fundamental building blocks of the universe, introduce the ATLAS detector, the Large Hadron Collider, and some of the searches being carried out, with emphasis on the work done by the UVic ATLAS team.



Prof. Ned DJILALI

*Professor of Mechanical Engineering
Institute for Integrated Energy Systems - University of Victoria
Canada Research Chair in Advanced Energy Systems Design & Computational Modelling*

GLIMPSES INTO CLEAN ENERGY RESEARCH: FUEL CELLS, RENEWABLE ENERGY & SMART GRIDS

The future energy system will require a shift to low carbon sources in both transportation and electricity generation sectors. Fuel cells and renewable energy are two of the most practical approaches to long term decarbonization of transportation and electricity supply.

A brief overview of fuel cell technology will be presented with a glimpse into water management, a critical aspect of fuel cell operation with fascinating underlying physics. The second part of the talk will discuss the challenge of renewable energy intermittency and how that can be addressed by demand response, a new paradigm in the way electricity grids operate.

The talk will close with a perspective on the evolving energy system.