



The Large Hadron Collider - World's Most Powerful Microscope



Department of
Physics &
Astronomy

You are invited to view a public lecture by
JOHN ELLIS* (photo at left) and **ROBERT ORR***
of CERN (European Organization for Nuclear Research).



International researchers at the Large Hadron Collider (LHC), in Geneva, Switzerland, will soon embark on one of science's greatest adventures. With its very high energy, previously seen only in cosmic rays, the particle collider will probe the inner structure of matter at distances ten times smaller than any previous experiments. The LHC will address many of the mysteries surrounding the smallest particles of matter. It may also pierce secrets that the Universe has hidden since the early stages of the Big Bang, such as the nature of dark matter and the origin of matter itself. This will be the largest scientific experiment ever attempted and the complex international efforts to bring the 27km-long machine to life, including Canada's involvement, will also be explained.

This is an archived talk originally shown at the world-renowned [Perimeter Institute](#) in Waterloo, Ontario. It will be shown **Wednesday 29 October 2008 at 7 p.m. in room PE261 of the 1st Choice Savings Sport & Wellness Centre, University of Lethbridge.**

Following the lecture, members of the Theoretical Physics Group of the [U of L Physics & Astronomy Department](#) will answer questions and participate in a discussion with those interested.

ALL ARE WELCOME! REFRESHMENTS WILL BE SERVED.

Further information: (403)329-2280, physics@uleth.ca

*** Please note that Drs. Ellis & Orr will not appear in person – their talk is recorded.**

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