The Anna I. McPherson Lectures in Physics 2010

Scientific Lecture:

The Coming Revolutions in Fundamental Physics

Friday March 26th 15:30

Rutherford Physics Building Keys Auditorium

I REVIEW THE PRESENT STATE OF KNOWL-EDGE IN ELEMENTARY PARTICLE PHYSICS AND THE QUESTIONS THAT WE ARE CUR-RENTLY ADDRESSING.

I DISCUSS THE EXPERIMENTAL REVOLUTIONS THAT MIGHT OCCUR AT THE LARGE HADRON COLLIDER, SOON TO BE FINISHED AT CERN.

I SHALL ALSO REVIEW THE STATE OF STRING THEORY. THE NECESSITY TO GO BEYOND THE STANDARD MODEL OF PARTICLE PHYSICS AND TO UNDERSTAND HOW QUANTUM GRAVITY HAS LED TO THIS AMBITIOUS ATTEMPT TO UNIFY ALL THE FORCES OF NATURE AND ALL FORMS OF MATTER AS DIFFERENT VIBRATIONS OF A STRING-LIKE OBJECT.

David J. Gross

Nobel Prize in Physics 2004

Public Lecture:

The Future of Physics

Thursday March 25th 18:00

Leacock Building 855 Sherbrooke West Room 132

IN THIS TALK I DISCUSS 25 QUESTIONS THAT MIGHT GUIDE PHYSICS, FROM COSMOLOGY TO BIOPHYSICS, OVER THE NEXT 25 YEARS.

