## A Celebration of Raoul Botts Legacy in Mathematics Symposium soulignant l'héritage mathématique de Raoul Bott June 9–13, 2008/9 au 13 juin 2008

## Geometric Langlands duality from six dimensions

Edward Witten
School of Natural Sciences
Institute for Advanced Study
1 Einstein Drive
Princeton, NJ 08540
USA

witten@ias.edu; mat@ias.edu

## Abstract

The talk will aim to explain how geometric Langlands duality can be deduced from a phenomenon in six dimensions. Geometric Langlands duality is a consequence of electric-magnetic duality in (maximally) supersymmetric Yang-Mills theory in four dimensions. But the best known explanation of that duality is that it is a consequence of the existence of a certain unusual conformal field theory in six dimensions.