# Algebra Seminar

## Speaker:

### Dr. Mikhail Kotchetov
### Memorial University of Newfoundland

**Wednesday, January 24, 2017**

**1:00 p.m.,  HH-3017**

## Lie  algebras of type D4 and triality

## Abstract:

The simple Lie algebras (or groups) of type D4 differ from all other members of the D series by the existence of a three-fold rotational symmetry of their Dynkin diagram. This so-called "triality" is not apparent in the standard matrix models of D4, but is revealed through the algebra of octonions. We will review the "trialitarian" models of D4 and, time permitting, their applications to the classification of gradings.