

The Research Seminar Presentation by

# Pedro Machado

will be held on

#### Wednesday March 23, 2016

## At 10:10 am

### **ALEXANDER HALL 337**

#### Title: Nitrous oxide emissions from a corn field in response to adoption of nitrogen fertilization best management practices

#### Abstract

Environmental pollution caused by nitrous oxide (N<sub>2</sub>O) emission is a global concern because N<sub>2</sub>O is a potent greenhouse gas and contributes to ozone destruction. Agriculture is an important economic sector contributing to N<sub>2</sub>O emission worldwide, largely from agricultural soil and fertilizer induced emissions. In this proposal we will compare N<sub>2</sub>O emission and corn yield from four combinations of N fertilization management practices, including the conventional practice most used by farmers and three "better management practices". The effectiveness of these nitrogen fertilizer management practices in mitigate N<sub>2</sub>O emission, and the yield response to these named better management practices will be tested in a field scale trial, with N<sub>2</sub>O measurement being performed by a micrometeorological method. The study will be the first of its kind performed in the "Northern Corn Belt" (Ontario) and results will allow a better understanding of the consequences of adopting a N management practice in terms of N<sub>2</sub>O emission and grain yield production.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS\*6900)