



The Department of Physics invites you to attend a  
thesis proposal presentation by:

**Alex Clesio Nunes Martins**

entitled

**“SU(3) correspondence rules with  
applications to semiclassical dynamics”**

*Supervisor: Dr. Hubert de Guise*

**ABSTRACT:**

The Wigner function formalism in phase space represents a powerful tool to describe a quantum mechanical state (or operator) and its dynamics. The exact quantum commutator can be approximated to a classical Poisson bracket, or given exactly (for some important cases) by correspondence rules. Interesting physics occurs in systems beyond spin due to the larger classical phase space. The objective of my research is: to develop correspondence rules in a similar way to those of SU(2) and, to apply the Wigner function formalism to explore SU(3) Hamiltonians which exhibit phase transitions.

**DATE:** Thursday, September 7<sup>th</sup>, 2017  
**TIME:** 2:30 p.m.  
**Room:** CB 4058