



## ANALYSIS SEMINAR

# Spiked vector solutions of coupled Schrödinger systems with critical exponent and solutions concentrating on spheres

João Marcos do Ó  
Universidade de Brasília

Date: 12/04/2019  
10h30 Horas  
Auditorium

**Abstract.** We consider a class of Gross-Pitaevskii equations (or Bose-Einstein system) defined in an annulus of four-dimensional Euclidean space involving critical growth in sense of Sobolev embedding. In the cooperative case, by using a reduction approach, we prove the existence of semiclassical states by means of a variational approach. The concentration behaviors of these solutions are also studied.