Title: ***Extended psychometrics: Beyond traditional assumptions of psychological measurement***

Speaker: ***Vithor Rosa Franco***
University of Brasilia and Department of Statistics,
Umeå University

Date: Tuesday the 23rd of April, 2019
Time: 13.00–14.00
Place: UB338

Abstract

Modern psychometrics relies on three assumptions: item response functions represent well the true item response process (pragmatic assumption); observed behaviors are a function of items and respondents' generic characteristics (process assumption); and measured properties are latent variables (construct assumption). The validity of psychological measurement depends on the validity of these assumptions, which are seldomly tested. The aim of this project is to propose alternatives for each of these assumptions. First, we propose a different parametrization of the one-parameter logistic item response model. Then, we propose a new measurement model that operationalizes Lewin's equation, which states that behavior is a function of the person and his or her environment. Finally, we propose a structure learning procedure for chain graphs that suits psychometrical data and does not rely on the construct assumption.