

2016 Series (Number 20)

Generalized Additive Modeling (GAM) and Its Application

Date & Time: 23 November 2016, 13:00 – 14:00 (Light lunch begins at 12:30pm)

Venue: Room G021, Tin Ka Ping Lecture Hall, Faculty of Education (E33)

Language: Mandarin

Audience: UM Staff / Postgraduate Students

Registration: <https://goo.gl/PksCRf>

Enquiries: Mr. Brendan LEI (FED_Event@umac.mo); Tel: 8822-4120

**A Complementary light lunch will be provided.*



Abstract

Generalized additive modeling (GAM; Hastie & Tibshirani, 1990) is an additive regression model. It offers a nonlinear method for identifying thresholds by estimating relationships without making any assumptions about whether the relationships are linear, quadratic or polynomial. A linear regression model is a special type of GAM that relaxes the strict linearity assumption of the linear regression model and part of the linear predictor is specified by summing the smooth functions of the predictor variables (Wood, 2006). In a word, GAM is applicable to analyze nonlinear and non-monotonic relationships between the response variable and explanatory variables. Increased attention has been paid to GAM in disciplines as ecology, education, psychology, medicine and so on. The talk will give an introduction about GAM and its application.



Speaker



Prof. Yan WU is Associate Professor in the Department of Applied Psychology at Guangdong University of Foreign Studies. She got her Ph.D. in Psychology from South China Normal University in 2011. Her research interests include psychometrics, psychological statistics, childhood education and adolescent development.