

## Statistics Seminar - George V. Moustakides

**Time:** Thursday, 1 December 2016 - 12:30pm to 1:30pm

**Location:** Groseclose 402

### Event Details

**TITLE:** Metrics and optimum tests for sequential change-detection

**ABSTRACT:**

We consider the problem of sequential detection of a change in the statistical behavior of an observed process. After presenting a panorama of applications from diverse scientific fields that can be formulated as a sequential change detection problem, we introduce the various metrics adopted in the literature for the mathematical setup of the problem of interest. In each case we make a thorough overview of the existing optimum detection strategies, mention applications the formulation is suitable for, and pay particular attention to results that have been recently developed. Finally, we discuss versions of the problems that are still open and have been challenging researchers for many years.

**BIO:** George V. Moustakides received the diploma in Electrical and Mechanical Engineering from the National Technical University of Athens, Greece, the MSE in Systems Engineering from the Moore School of Electrical Engineering, University of Pennsylvania, Philadelphia, USA and the MSc and PhD in Electrical Engineering and Computer Science from Princeton University, Princeton, USA. Since 2007 he is with the department of Electrical and Computer Engineering, University of Patras, Greece while prior to this position he held long-term appointments as junior and senior researcher (directeur de recherche) with INRIA, France and as professor with the University of Thessaly, Greece. During his career Prof. Moustakides also held visiting scholar and/or adjunct professor positions at numerous universities in USA as Princeton University, University of Pennsylvania, Columbia University, University of Maryland, University of Illinois at Urbana-Champaign and recently Rutgers University. He has served as associate editor for Detection and Estimation (2011-2014) and is currently serving as inaugural associate editor for Sequential Methods (2016-2019) for the IEEE Transactions on Information Theory. His research focuses on Sequential Analysis and Statistical Signal Processing.

