

## Department of Electrical and Computer Engineering

**Title:** « Multicast Routing in Sparse Splitting Optical Networks»

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**Wednesday, 12<sup>th</sup> February 2014, 17:30 – 18:30**  
**Room KENTP. - A008, Old Campus**  
**University of Cyprus**

### **Abstract:**

Multicasting in optical networks is achieved utilising optical splitters. An optical splitter is a device that splits the received signal in two or more copies, making the network capable of multicasting. In practice only a fraction of the network nodes have this ability. In some networks, the remaining (i.e. multicast incapable) nodes have Drop-and-Continue (DaC) ability: in case they are destinations of the multicast group, they can drop a fraction of the incoming signal locally and transmit the rest to the next node. This presentation deals with the major open problems in this field: the development of efficient multicast routing algorithms under the sparse splitting constraint as well as of algorithms for efficient allocation of the multicast capable nodes, for networks with or without DaC nodes.

### **Biography:**

Costas Constantinou holds a Bachelor in Physics from the Aristotelian University of Thessaloniki and a PhD in electrical engineering from the University of Cyprus. He has joined KIOS Research Center for Intelligent Systems and Networks in September 2013. His research interests lie in the area of routing, wavelength assignment and protection in optical mesh networks.