

EE Department Seminars

June 29, 2010, Wednesday, 14:00

Yorgo Istefanopulos Meeting Lounge (KB 217)

Cable-Wireless Network Integration

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The topic of this talk is Cable-Wireless integration. The cable operators offer wireless services to increase the number of subscribers, support business services for vertical markets and enable new revenue areas such as 3G/4G data offload and location based services. Recent successes in Cable-WiFi deployments in North America along with the explosion of smart phones and tablet computers lead new deployments around the world. We will present use cases with cable-wireless integrated nodes for different business models and address the challenges in deployment and operations in terms of scalability, flexibility and performance. We will review different solutions with Wi-Fi Access Points and Picocells integrated with cable modems and cable power supplies. We will present system architectures with backoffice integration by discussing configuration and provisioning, monitoring and diagnostics, performance, security and mobility management.

***Short Bio:** Sebnem Zorlu Ozer received her B.Sc. degree in Electronics and Telecommunications Engineering with highest honors in 1992 from Istanbul Technical University, the M.Sc. degree in Electrical Engineering in 1995 from Bogazici University, and the Ph.D. in Electrical Engineering in 2001 from New Jersey Institute of Technology. From 1997 to 2001, she was a Research Assistant with the New Jersey Center for Multimedia Research. From 2001 to 2005, she was a Systems Engineer at MeshNetworks Inc., where she worked on the design and development of ad hoc and mesh networks and participated in the 802.11s standardization efforts. Since 2005, she has been a Principal Staff Systems Engineer at Motorola Inc. Her design and development work focused on quality of service provision, resource management, link adaptation and medium access control schemes in mobile networks. Currently, she works in Access Networks system engineering group where her primary responsibilities are focused on the design and development of Medium Access Control and upper layer protocols for HFC, PON and wireless networks and related standardization efforts. She is a Distinguished Innovator at Motorola Mobility Inc. and has authored numerous refereed publications and patents on networking and communications.*