

# 学术报告会

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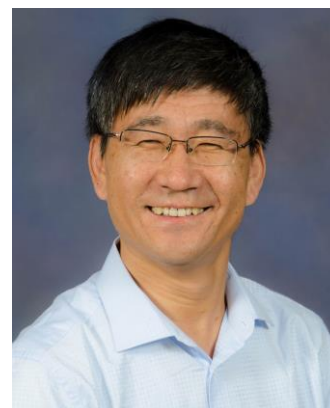
地点: 电院群楼2-410会议室

## Architectural Design for Collaborative

## Cognitive Radio Networks

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### Abstract:

Steadily increasing mobile data traffic due to the extensive use of smartphones and tablets has been generating tremendous traffic burden on existing telecommunications infrastructure. Although significant efforts have already been made on spectrum efficiency by developing various innovative transmission technologies, we are still facing the bottleneck imposed by the physical transmission limit (Shannon said so). Besides, efficient physical transmission technologies will not work well without network support for end-to-end user services. In this talk, the speaker will discuss collaborative cognitive network architecture for efficient cross-network resource management. This architecture not only enables network operators to harvest unused bands opportunistically and efficiently, but also offers other optional strategies for network performance improvements.

### Biography:

**Yuguang "Michael" Fang** (F'08) received a BS/MS degree from Qufu Normal University, Shandong, China in 1987, a Ph.D degree from Case Western Reserve University in 1994 and a Ph.D. degree from Boston University in 1997. He joined the Department of Electrical and Computer Engineering at University of Florida in 2000 and has been a full professor since 2005. He holds a University of Florida Research Foundation (UFRF) Professorship from 2006 to 2009, a Changjiang Scholar Chair Professorship with Xidian University, China, from 2008 to 2011, and a Guest Chair Professorship with Tsinghua University, China, from 2009 to 2012. Dr. Fang received the US National Science Foundation Career Award in 2001 and the Office of Naval Research Young Investigator Award in 2002, and is the recipient of the Best Paper Award from IEEE ICNP (2006). He has also received a 2010-2011 UF Doctoral Dissertation Advisor/Mentoring Award, 2011 Florida Blue Key/UF Homecoming Distinguished Faculty Award and the 2009 UF College of Engineering Faculty Mentoring Award. He is the Editor-in-Chief of IEEE Transactions on Vehicular Technology, was the Editor-in-Chief for IEEE Wireless Communications (2009-2012) and serves/served on several editorial boards of journals including IEEE Transactions on Mobile Computing (2003-2008, 2011-present), IEEE Transactions on Communications (2000-2011), and IEEE Transactions on Wireless Communications (2002-2009). He has been actively participating in conference organizations such as serving as the Technical Program Co-Chair for IEEE INFOCOM'2014 and the Technical Program Vice-Chair for IEEE INFOCOM'2005. He is a fellow of the IEEE.