

# Wireless-Optical Convergence: The Case for Fibre-connected Massively Distributed Antennas

Presented by Dr. Victor C.M. Leung – IEEE Distinguished Lecturer

## Build Your Own Burger and Open Bar at Winking Lizard!

Sponsored by the IEEE Cleveland Section and Communications Society.

### Date:

**June 20, 2011**

### Time:

**6:15 PM – FREE Meal**

**7:15 PM - Presentation**

### Place:

**Winking Lizard (Side Bar)  
Rockside Corners Shopping Center  
6901 Rockside Road  
Independence, OH 44131**

### FREE Food/Drink:

**Build Your Own Burger Bar  
Open Bar**

### CPD:

**1 Credit Available  
Bring Flyer For Credit**

### Space is limited

To reserve your seat, you **MUST** RSVP by June 16 at:  
<http://www.clevelandieee.org/rsvp>

Winking Lizard requires attendees under 21 to be accompanied by a guardian.

Wireless access architectures employing femto- and pico-cell base-station/access point can reduce power consumption and enhancing wireless spectrum utilization by shortening the links and exploiting cooperative and cognitive mechanisms, but co-ordinations between base-stations or access points may incur large overheads.

Dr. Leung will present a novel architecture that exploits wireless-optical convergence for next generation broadband wireless access employing fibre-connected massively distributed antennas (BWA-FMDA). In this architecture, a large number of distributed antennas are connected via radio over fibres (RoF) to a centralized processing entity to minimize the communication overhead of system co-ordination.

The coverage area of the proposed BWA-FMDA system can range from a few tens of square meters in homes and office environments, delivered via IEEE 802.11a/g/n or femto-cell hotspot solutions, to several square kilometers supporting last-mile technologies such as WiMAX, LTE, and LTE-A using pico- and micro-base-stations.

Dr. Leung is a registered professional engineer in the Province of British Columbia, Canada. He is a Fellow of IEEE, a Fellow of the Engineering Institute of Canada, and a Fellow of the Canadian Academy of Engineering. He is a Distinguished Lecturer of the IEEE Communications Society.

**PLEASE RSVP AS SOON AS POSSIBLE. OUR FINAL ATTENDANCE NUMBER IS DUE AT THE CLOSE OF BUSINESS ON JUNE 16.**



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