

# ELECTRON

September 2001

## IEEE Communications Society Distinguished Lecture Tour Presentation

### FOURTH GENERATION CELLULAR SYSTEMS AND SMART ANTENNAS

**Date:** Thursday, September 27, 2001

**Time:** 6:00 p.m. - Food and refreshments will be served 6:30-8:00 p.m. –  
Presentation

**Location:** O. J. Miller Auditorium, Duke Energy Center, 526 S. Church St.,  
Charlotte

**Parking:** Park behind the Energy Center (enter from Mint Street). At the  
entrance lift gate inform Security that you are attending and IEEE meeting.

**Contact:** RSVP by September 25 by contacting:

- Robert Beazley, COMSOC Chapter Chair, 704-892-1477, [consulting@ocns.com](mailto:consulting@ocns.com)  
or Tracy Blackmon, 704-892-1477. [trblackm@duke-energy.com](mailto:trblackm@duke-energy.com)

- **Presenter: Dr. Jack H. Winters, AT&T Labs-Research**

IEEE Distinguished Lecturer Dr. Jack H. Winters is Division Manager of the Wireless Systems Research Department at AT&T Labs-Research. He is also a Fellow of the IEEE, Area Editor for Transmission Systems for the IEEE Transactions on Communications, Technical Program Chair for the Fall 2001 Vehicular Technology Conference, and New Jersey Inventor of the Year for 2001. His research interests include signal processing techniques, such as smart antennas, for increasing the capacity and performance of wireless local area networks and cellular systems.

In this talk we discuss the evolution to high-speed data mobile wireless systems, with data rates in excess of 10 Mbps. We describe the extension of wireless local area networks using 802.11b and 802.11a, and cellular systems (WCDMA), to provide high-speed ubiquitous access. Smart antennas are then described and shown as a key technology to provide the needed enhancements of range extension, interference suppression, and capacity increase.

## **Family Fun Day Picnic**

**Sponsored by**

## **The Charlotte Section**

Please join us at our annual Family Fun Day Picnic. This year's picnic will be held at Nevin Community Park. Nevin's is one of Charlotte's newest parks offering walking trails, soccer and softball fields, playgrounds, horseshoe pits and shuffleboard. The Family Fun Day activities will include:

- Water balloon toss
- Door Prizes
- Music (you may bring your own CD's)

The picnic will be catered by Sony's BBQ. The menu includes BBQ pork, BBQ chicken, baked beans, coleslaw, potato salad and tea.

**Date:** Thursday, October 4, 2001

**Time:** 6:15 PM Dinner Served

**Location:** Nevin Community Park (Shelter #1) 6000 Statesville Road

**Directions:** From I-85, take Statesville Road exit, go approximately 1 mile (away from City), take first right after Ranson Middle School.

From I-77, take Sunset Road east exit, go approximately ½ mile and make Right on Statesville Rd (HWY 21), go approximately ½ mile, park entrance On the left.

**cost:** \$5.00 for members, \$7.00 for non members, \$3.50 for children 11 and under

**Reservations:** Please purchase tickets by October 1, 2001

**Contact the following for tickets:**

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