Federal Communications Commission 445 12th St., S.W. Washington, D.C. 20554

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Tutorial on "Capacity Enhancement Methods for Wireless Networks"

On February 20, 2004, the FCC's Office of Engineering and Technology will provide a tutorial on "Capacity Enhancement Methods for Wireless Networks: Complementary Beamforming, Space-Time Coding and Space-Time Collaborative Communications" from 10:00 to 12:00 noon in the Commission Meeting Room (TW-C305), 445 12th Street, S.W., Washington, D.C.

The speaker, Dr. Vahid Tarokh is currently Gordon-McKay professor of electrical engineering at the Harvard University and a Vinton Hayes senior research fellow. He is responsible for a number of inventions, most notably his pioneering invention of Space-Time Coding (jointly with Seshadri and Calderbank) and Complementary Beamforming Techniques (jointly with Alamouti and Choi). Dr. Tarokh has been ranked in the list of Top 10 Most Cited Authors in Computer Science by the ISI Web of Science. He has also received a number of awards including Gold Medal of the Governor General of Canada, 1995 IEEE Information Theory Society Prize Paper Award 1999, the National Science Foundation's The Alan T. Waterman Award 2001.

In his talk he will discuss capacity enhancements methods based on antenna arrays for wireless networks. Space-time coding methods that are not in general backward compatible with existing WLAN standards will be reviewed. Motivated by the issues of backward compatibility, he will then discuss beamforming and complementary beamforming for carrier sensing wireless networks, followed by some recent results on collaborative space-time communications.

Those who wish to attend this tutorial will be seated on a first-come first-serve basis. Reservations are neither accepted nor required.

For further information, contact Dr. Michael Marcus at 202-418-2418, or Ms. Young Carlson at 202-418-2427. Real Audio and streaming video access to the tutorial will be available at http://www.fcc.gov/realaudio.