



University of Pavia

**Ph.D. School of Electrical and Electronics Engineering and Computer Science
Ph.D. School of Microelectronics**

SEMINAR

Post-Moore THz Electronics

Prof. Ching-Kuang Tzuang
University of Chinese Academy of Sciences, China

20 November 2015, h 11.00

Aula Seminari ex Dipartimento di Elettronica, Floor D
Department of Electrical, Computer and Biomedical Engineering

Abstract: The Moore's law stalls and may retire in the next decade, when the scaling rule approached its limit in device speed and density. The talk points to a possible path utilizing the band-gap engineering that extends the speed of integrated circuit which eventually erodes the THz gap (300 GHz to 10 THz), thereby, opening the gateway of microwave electronics for integrating THz electronic systems. The talk will show the effects of microwave fields and waves on THz electronics, leading to a better and useful integrated THz electronics system design.

Bio: Ching-Kuang Clive Tzuang received his B.S. degree in electronic engineering from National Chiao Tung University, Hsinchu, Taiwan, R.O.C., in 1977, the M.S. degree from the University of California at Los Angeles, in 1980, and the Ph.D. degree in electrical engineering from the University of Texas at Austin, in 1986. From 1981 to 1984, he was with TRW, Redondo Beach, CA. He became an associate professor at the Institute of Communication Engineering, National Chiao Tung University in 1986, and a full professor in 1991. In February 2004, he joined the Department of Electrical Engineering, National Taiwan University, where he conducted research on advanced guiding structures for RF sensor system-on-chip technology development. Dr. Tzuang retired from National Taiwan University and became Professor Emeritus in 2012. He was invited to Tianjin University, China, to found a THz research laboratory; since February 2015, he helped establishing the "Millimeter-Wave and THz Technologies Transcend" research center in Beijing Economic Technological Development Area. Dr. Tzuang served the editor-in-chief of the IEEE Microwave and Wireless Components Letters (2010-2012), editorial board member of the IEEE Proceedings (2013-to date), MTT-S Publication Committee (2015-to date). He is an IEEE Fellow.

Organizer

Prof. Maurizio Bozzi

Ph.D. Coordinators

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Seminar in English

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