



University of Pavia

Ph.D. School in Electronics, Computer Science
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SEMINAR ANNOUNCEMENT

Recent Progress on Antennas and Wireless Power for Biomedical Applications

Prof. Yongxin Guo

National University of Singapore, Singapore

Tuesday, 28 March 2017, 11:00am

Aula Seminari ex Dipartimento di Elettronica (floor D)

Abstract – Wireless power and data telemetry technologies for biomedical and healthcare applications have received a lot of attention recently. Numerous applications in medical diagnostics and therapeutics ranging from cardiac pacemakers to emerging devices in visual prosthesis, brain computer interfaces and body area networks have spurred electronic engineers to propose new wireless medical devices. In the meantime, the ageing population poses many challenges to healthcare systems, especially on chronic illness management. In this talk, I would mainly cover our recent research progress on wearable/implantable antennas and wireless power for biomedical applications. A few related ongoing biomedical projects for on-body and in-body applications will be addressed. In addition, I would also briefly introduce my other research activities aiming at high-density integrated transceiver technologies for wireless communications.

Biography – Prof Guo joined the Department of Electrical and Computer Engineering, National University of Singapore (NUS) as an Assistant Professor in February 2009 and was promoted to a tenured Associate Professor in Jan 2013. He is Director of Center for Microwave and Radio Frequency at the Department of ECE of NUS. He has authored or co-authored 2 book chapters, 187 international journal papers and 190 international conference papers. Thus far, his publications have been cited by others more than 5200 times and the H-index is 41 (source: Google Scholar). He holds 8 granted/filed Patents in U.S. or China. His current research interests include microstrip antennas, implantable/wearable antennas, on-chip antennas and antennas in package, RF energy harvesting and wireless power, and MMIC modelling and design. He has graduated 9 PhD students at NUS.

Prof Guo is the General Chair for 2017 International Applied Computational Electromagnetics Society (ACES) Symposium, 01-04 August 2017 in Suzhou, China, and was General Chairs for IMWS-AMP 2015 and IMWS-Bio 2013. He is serving as a Technical Program Committee (TPC) co-chair for IMWS-AMP 2017 and was TPC co-chair for RFIT2009. He is serving as Associate Editors for IEEE Journal of Electromagnetics, RF and Microwave in Medicine and Biology (JERM), IEEE Antennas and Wireless Propagation Letters (AWPL), IET Microwaves, Antennas & Propagation and Electronics Letters. He was a recipient of the Young Investigator Award 2009, National University of Singapore. He received 2013 Raj Mittra Travel Grant Senior Researcher Award. He received the Best Poster Award in 2014 International Conference on Wearable & Implantable Body Sensor Networks (BSN 2014), Zurich, Switzerland. He is a co-recipient of Design Contest Award of the 20th International Symposium on Low Power Electronics and design (ISLPED), Rome, Italy, 2015. His PhD students received Best Student Paper Awards from IEEE MTT-S IMWS-Bio 2015 in Taiwan, IEEE IWEM 2013 in Hong Kong, 2011 National Microwave and Millimeter-Wave Conference at Qingdao, China and IEEE ICMMT 2010 in Chengdu, China.

Organizer

Prof. Maurizio Bozzi

Ph.D. Coordinators

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The seminar will be held in English

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