

短期课程

短距离无线电波传播：

理论，模型与面向未来的应用

课程介绍

在5G高度发展的背景下，无线电波传播特性研究近年来得到产业界和学术界的广泛重视。欧洲天线学校（European School of Antennas, 简称ESoA）和同济大学决定于2017年10月9日至12日在上海同济大学嘉定校区举办首届短距离无线电波传播特征短期课程。

该课程是ESoA首次在中国举办，旨在为高年级本科生、硕士博士研究生、产业界工程师提供系统全面的电波传播理论、仿真技术、测量建模与实践的介绍与研讨。此外，结合5G高频毫米波、大规模天线阵列、以及高速动态场景等最新研究信道领域的成果，本课程也将为未来移动通信如何基于深度挖掘信道资源的发展前景进行深入的展望，为听课的成员提供启发和思路。本课程是ESoA多年培育与建设的系列课程之一，由信道界具有丰富科研与教学经验的教授主讲。此次在华首次举办，希望能够加强国内高校、科研机构、企业与欧洲之间的联系，创造协同科研的机遇，培育联合创新的基础。

课程结束后将向学员颁发由欧洲天线学校认证的结课证书。欢迎广大高校本科生、硕士博士研究生，各大科研机构、企业的研发工程师以及研究人员踊跃报名。

WelCome



日期：

2017年10月9日至12日

地址：

上海嘉定区曹安公路4800号
同济大学嘉定校区，智信馆，309教室

费用：

- 440 欧 (或 3500 元人民币) 全日制本科生，研究生与博士研究生
- 880 欧 (或 6900 元人民币) 其他学员
- 上述费用含听课费,茶歇,午餐与听课材料费

更多信息请咨询

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报名请发送姓名+手机号+e-mail+学校/公司至

esoash@163.com
或扫描右边二维码参与报名。



中国, 上海

2017年, 10月9日至12日

Propagation Channel Characterization



课 程 排

师 阵 资 容

• 2017年10月9日 星期一

8:30-9:30	欢迎, 课程与授课老师介绍, 无线通信信道建模概述	Prof. Yin (TJU)
9:30-10:30	电波传播与散射理论基础 (第一部分)	Prof. Brennan (DCU)
10:30-11:00	茶歇	
11:00-12:00	电波传播与散射理论基础 (第二部分)	
12:00-13:00	电波散射计算中的全波技术 (第一部分)	
13:00-14:00	午餐	
14:00-15:00	电波散射计算中的全波技术 (第二部分)	
15:00-16:30	几何传播理论 (第一部分)	Prof. Esposti (Unibo)
16:30-17:00	茶歇	
17:00-18:00	练习	Prof. Brennan

• 2017年10月10日 星期二

8:30-10:30	几何传播理论 (第二部分)	Prof. Esposti
10:30-11:00	茶歇	
11:00-13:00	基于射线理论的传播预测工具实践	
13:00-14:00	午餐	
14:00-16:30	RT预测的加速技术	
16:30-17:00	茶歇	
17:00-18:00	练习	

• 2017年10月11日 星期三

8:30-10:30	多径传播	Prof. Cheng (PKU)
10:30-11:00	茶歇	
11:00-13:00	车载传播环境及无人机通信场景中的信道建模	
13:00-14:00	午餐	
14:00-15:00	MIMO (多入多出) 信道测量技术	Prof. Yin
15:00-16:30	基于实测数据分析的信道参数估计与特征提取及性能评估	
16:30-17:00	茶歇	
17:00-18:00	练习	

• 2017年10月12日 星期四

8:30-10:30	太赫兹传播 (第一部分)	Prof. Kuerner (TUBS)
10:30-11:00	茶歇	
11:00-13:00	太赫兹传播 (第二部分)	
13:00-14:00	午餐	
14:00-15:30	课程测验	

Thomas Kürner received his Dipl.-Ing. degree in Electrical Engineering in 1990, and his Dr.-Ing. degree in 1993, both from University of Karlsruhe (Germany). Since 2003 he is Full University Professor for Mobile Radio Systems at the Technische Universität Braunschweig (TUBS). His working areas are indoor channel characterization and system simulations for high-speed short-range systems including future terahertz communication system, propagation, traffic and mobility models for automatic planning and self-organization of mobile radio networks, vehicle-to-x-communications as well as accuracy of satellite navigation systems. In 2012 he was a guest lecturer at Dublin City University within the Telecommunications Graduate Initiative in Ireland. He has actively contributed to the channel modelling document supporting the standardization of IEEE 802.11ad. Currently he is a voting member of IEEE 802.15 and is chairing the IEEE 802.15 IG THz and the IEEE 802.15.3d TG 100G. Prof. Kürner is a member of the Board of Directors of the European Association on Antennas and Propagation (EurAAP) and from 2012 to 2017. Since 2008 he is Associate Editor of IEEE Transactions on Vehicular Technology and since 2017 also Associate Editor of IEEE Antennas and Propagation. He is a Senior Member of IEEE and an elected member of URSI Commission F.



Vittorio Degli-Esposti received the 'Laurea' degree (with Honors) and the Ph.D. degree in Electronic Engineering from the University of Bologna (Unibo), Italy, in 1989 and in 1994, respectively. Since November 1994 he has been with the Department of Electrical Engineering (DEI) of the University of Bologna, where he is now Associate Professor and teaches courses on Electromagnetic, Radio Propagation and Wireless Systems. He is co-organizer and lecturer of the biennial PhD Courses "Short range radio propagation: theory, models and future applications" and "Large Scale Radio Propagation" of the European School of Antennas. He participated in several European projects including the European Cooperation Actions COST 231, 259, 273, 2100 and IC1004, the European Networks of Excellence NEWCOM and NEWCOM++ the 7th FP IP European Project ALPHA and others. He is author or co-author of more than 110 peer-reviewed technical papers in the fields of applied electromagnetic, radio propagation and wireless systems. He has been Short-Courses and Workshops Chair of EuCAP 2015. He was an elected member of the Radio Propagation Board of the European Association on Antennas and Propagation (EuRAAP) from 2013 to 2015. He is Associate Editor of the scientific Journal "IEEE Access" and Senior Member of the IEEE.



尹学锋 received his Ph.D. in wireless communications from Aalborg University, Denmark, in 2006. In 2008, he joined the college of electronics and information engineering Tongji University (TJU), Shanghai, China. He became a full professor in 2016 and served as the vice dean for the college since then. His research interests include high-resolution parameter estimation for propagation channels, measurement-based channel characterization and stochastic modelling for 5G wireless communications, channel simulation based on random graph models, radar signal processing and target recognition. He has published about 100 technical papers and co-authored the book "Propagation channel characterization, parameter estimation and modeling for wireless communications" published by John Wiley and Sons IEEE Edition in 2016.



Conor Brennan received his PhD in 1998 from Trinity College Dublin (TCD), and spent several years as a post-doctoral researcher with the TCD wave scattering group before joining Dublin City University (DCU) as a lecturer in 2003 and becoming a senior lecturer in 2013. His primary research area is in computational methods for electromagnetic wave propagation and scattering, and applying such research to associated problems such as indoor user location and tracking, energy efficient wireless communications and etc. He has authored or co-authored over 100 peer-reviewed publications in international conference proceedings and international journals. He has served on numerous technical program committees, including most recently as convened session chair of EuCAP17. Dr. Brennan serves on the Royal Irish Academy Committee on Engineering and Computer Science.



程翔 received the PhD degree from Heriot-Watt University and the University of Edinburgh, Edinburgh, U.K., in 2009. He has been with Peking University (PKU) since 2010, first as a Lecturer, and then as an Associate Professor since 2012. His current research interests include mobile propagation channel modeling, next generation mobile cellular systems, intelligent transportation systems, and hardware prototype development. He has published more than 120 research papers in journals and conference proceedings with more than 1860 citations in Google Scholar.

