

Stand on the IEEE Antennas & Propagation Standards

Abstract

The terminology standards on antennas (IEEE Std 145-2013) and radio wave propagation (IEEE Std 211-2018) are important documents that guarantee the right use of accepted terms in technical papers and reports. IEEE Std 149-2021 (antenna measurement), IEEE Std 1720-2012 (near field antenna measurement) & IEEE Std. 1502-2020 (radar cross-section measurement) prove useful when performing antenna measurements. A computational electromagnetics standard for the modeling and simulation of antennas is also being developed (IEEE P2816). The workshop will provide an overview of these standards developed by the IEEE Antennas & Propagation Standards Committee.

Workshop outline

The workshop will be interactive with the participants. The speakers will present the already developed standards as well as the standards that are being developed (IEEE P2816) or revised (IEEE Std 145-2013 and IEEE Std 1720-2012).

Speakers

Prof. Vikass Monebhurrin (SM'07) received the PhD degree in 1994 and the Habilitation à Diriger des Recherches in 2010 from Université Pierre et Marie Curie and Université Paris-Sud, respectively. His research contributed to the international standardization committees of CENELEC, IEC, and IEEE. He is author and co-author of more than hundred peer-reviewed international conference and journal papers and five book chapters. He is an active contributor to the international standardization committees of IEC 62209, IEC 62232, IEC/IEEE 62704 and IEEE1528. He serves as Associate-Editor for the IEEE Antennas and Propagation Magazine since 2015 and Transactions since 2016, and Editor of the IoP Conference Series: Materials Science and Engineering since 2013. He is the founder of the IEEE RADIO international conference for which he served as General Chair for all seven editions since 2012. He is the Chair of the international committees of IEC/IEEE 62704-3 since 2010 and IEEE Antennas and Propagation Standards since 2015. He was recipient of the URSI Young Scientist Award in 1996, IEEE Standards Association International Joint Working Group Chair Award in 2017, IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award in 2018, International Electrotechnical Commission 1906 Award in 2018 and IEEE Standards Association International Award in 2019.

Mr. Lars Foged (M'91-SM'00) received his B.S. from Aarhus Teknikum, Denmark in 1988 and M.S. in Electrical Engineering from California Institute of Technology, USA in 1990. He was a "graduate trainee" of the European Space Agency, ESTEC and in the following ten years, designed communication and navigation antennas in the satellite industry. He led the antenna design effort on the recently launched GALILEO space segment and performed the multi-physics design of shaped reflectors for the EUTELSAT W satellites, still serving European users. Following his passion to rationalize the multi-disciplinary antenna design process, including measurements and simulations, he joined MVG (formerly SATIMO) in 2001 and founded the Italian branch office. In MVG, he initiated close collaborations with universities and research institutions on measurements with focus on antennas and techniques for analysis/post-processing. He has held different technical leadership positions in MVG and is currently the Scientific Director of the Microwave Vision Group, and Associate Director of Microwave Vision Italy. He has authored or co-authored more than 200 journal and conference papers on antenna design and measurement topics and received the "Best Technical Paper Award" from AMTA in 2013. He has contributed to five books and standards, and holds four patents.

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Dr. Vince Rodriguez (SM'06) attended The University of Mississippi (Ole Miss), in Oxford, Mississippi, where he obtained his B.S.E.E. in 1994. Following graduation Dr. Rodriguez joined the department of Electrical Engineering at Ole Miss as a research assistant. During that period, he earned his M.S. and Ph.D. (both degrees on Engineering Science with emphasis in Electromagnetics) in 1996 and 1999 respectively. After a short period as visiting professor at the Department of Electrical Engineering and Computer Science at Texas A&M University-Kingsville, Dr. Rodriguez joined EMC Test Systems (now ETS-Lindgren) as an RF and Electromagnetics engineer in June 2000. In November 2014 Dr. Rodriguez Joined MI Technologies (now NSI-MI Technologies) as a Senior Applications Engineer. In this position Dr. Rodriguez works on the design of antenna, RCS, and radome measurement systems. During his tenure at NSI-MI Dr. Rodriguez was involved in designing several Antenna and RCS anechoic ranges for near to far field, Compact Range and far field measurements. In 2017 Dr. Rodriguez was promoted to staff engineer positioning him as the resident expert at NSI-MI of RF absorber and indoor antenna ranges. He is the author of more than fifty publications including journal and conference papers and book chapters.