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Treffen Sie Kollegen/-innen und bringen Sie sich auf den aktuellsten Stand von Technik und Forschung!

Dr. D. V. Giri

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**“Short Pulse Technologies
with Illustrative Applications”**

Datum:	28.05.2020
Zeit:	13:00 -14:30 Uhr (UTC+2)
Online:	Microsoft Teams (click here to join)

Kontakt:

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Hints: the online meeting invitation will be send out by email in case of any changes, please **sign up in advance** (E-mail: cheng.yang@tuhh.de)



EMC Distinguished Lecture by Dr. D. V. Giri

Short Pulse Technologies with Illustrative Applications

Parabolic mirrors are useful in radiating impulse-like waveforms. The antenna subsystem consists of a paraboloidal-reflector illuminated by a pair of conical transmission lines. Because of the spherical TEM feed, this antenna is non-dispersive. For an applied fast-rising voltage function, the radiated electric field spectrum is flat over two decades of frequencies. Some fundamental differences between frequency independent antennas (ex: log-periodic dipoles) and the present non-dispersive time-domain antennas will be discussed. Familiar concepts such as antenna gain and radiation pattern need to be redefined for time-domain antennas. Design, fabrication, working principles and performance of this class of antennas are discussed. Such a radiating system has resulted in an emerging technology with many military and civilian applications, some of which will also be discussed. .

Dr. D. V. Giri obtained the B.Sc., Mysore University, India, (1964), B.E., M.E., Indian Institute of Science, (1967) (1969), M.S., Ph.D., Harvard University, (1973) (1975), Certificate, Harvard Introduction to Business Program, (1981). He has 45 years of work experience in the general field of electromagnetic theory and its applications in NEMP (Nuclear Electromagnetic Pulse), HPM (High-Power Microwaves), Lightning, and UWB (Ultra Wideband). He is currently a consultant based in Wellesley, Massachusetts, performing R&D work for the U.S. Govt. and Industry. He is also an Adjunct Professor in the Dept. of ECE, University of New Mexico, Albuquerque. He has taught graduate and undergraduate courses in the Dept. of EECS, University of California, Berkeley campus. He is a Life Fellow of the IEEE, Member of Commission B, URSI, International Chairman of Commission E, URSI (2014-2017), SUMMA Foundation Fellow, Recipient of the IEEE Antennas and Propagation Society's 2006 John Kraus Antenna Award, and Recipient of the 2017 Carl Baum Medal. He is a Co-Editor with Prof. Raj Mittra, and they have started an on-line Forum and Journal on Electromagnetics called FERMAT. He has published over 200 papers, books, reports etc.