

Sehr geehrte Damen und Herren,
hiermit ergeht die Einladung des Instituts für Kommunikationsnetze und Satellitenkommunikation zum Gastvortrag des Herrn Prof. Dr. Fernando Pérez-Fontán, University of Vigo, Spanien, mit der Bitte um Weitergabe in Ihrem Bereich:

Titel des Vortrages: „Modeling the clutter loss in slant paths“

Datum: Dienstag, 2. Juni, 2026

Uhrzeit: 13:00 Uhr

Ort: Seminarraum HF01092, Inffeldgasse 12, 8010 Graz

Abstract

In this presentation, work toward developing a clutter loss model for slant paths is discussed. This loss must be added to that due to free space to work out the overall loss between one transmitter on the ground and an elevated receiver: satellite, airborne platform, UAB, etc. or vice versa. The calculation of this parameter is relevant in interference studies, especially at this point where there is a significant demand for spectrum and there is the need to share bands between different applications and services. Here a physical-statistical approach is proposed which is elevation dependent while it encompasses all possible azimuths. It smoothly covers a wide range of frequencies from the lower UHF to millimeter waves. This material has been contributed to ITU-R efforts for developing an improved recommendation (ITU-R Rec. P.2108) on clutter loss modeling.

CV

Fernando Pérez-Fontán was born in Villagarcía de Arosa, Spain. He received the Diploma degree in telecommunications engineering and the Ph.D. degree from the Technical University of Madrid, Madrid, Spain, in 1982 and 1992, respectively. He is currently a Full Professor with the Telecommunications Engineering School, University of Vigo, Vigo, Spain, where he is also with the atlantTic Research Center. He has authored a number of international journal articles and conference papers. He has coauthored the book Modeling the Wireless Propagation Channel: A Simulation Approach with MATLAB (Wiley, 2008). He is active in ITU-R Study Group 3. His current research interests include terrestrial and satellite mobile, and fixed radio communication propagation channel modeling.