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Sommario/riassunto

"Nonlinear Distortion in Wireless Systems: Modelling and Simulation with Matlab(r) describes the principles of modelling and simulation of nonlinear distortion in single and multichannel wireless communication systems using both deterministic and stochastic signals. Models and simulation methods of nonlinear amplifiers explain in detail how to analyze and evaluate the performance of data communication links under nonlinear amplification. The book deals with the analysis of nonlinear systems with stochastic inputs and establishes the performance metrics of communication systems with regard to nonlinearity. The relationship between nonlinear system parameters (which are model dependent) and system performance figures of merit is established when the input to the system consists of real-world communication signals. The book also addresses the problem of how to embed models of distortion in system-level simulators such as MATLAB™ and MATLAB Simulink™ where practical techniques that professionals can use immediately on their projects are

presented. The book explores simulation and programming issues and provides a comprehensive reference of simulation tools for nonlinearity in wireless communication systems"--