Department of Engineering Science

Announces 7th lecture of the
Engineering Science Lecture Series
Academic Year 2018-2019

This is a series designed to benefit the Sonoma State students and faculty in the School of Science and Technology, high tech and biotech industries and related businesses and community in the North Bay Region.

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The Lecture Series covers a broad range of topics with focus on recent developments and trends and provides a platform for the exchange of ideas among the audience.

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Attendance is open to the students, faculty and staff of SSU and other academic institutions, engineers and scientists from industries, members of the business community and members of the community, in general. A parking permit is required to park on campus, and is available for $5.00 at machines in the parking lots. Talks are otherwise free.

Days & Dates: 1st & 3rd Thursday of each month
Venue: Cerent Engineering Science Complex, Salazar Hall Room #2009A
Reception: 4:00 to 4:30 p.m.
Lecture: 4:30 to 5:15 p.m.
Q&A: 5:15 to 5:30 p.m.

Acknowledgement
The ES Lecture Series is supported by the local industry including Keysight Technologies.

“Quantifying and Measuring Phase Noise in RF and Microwave Signals”
by
Dr. Salam Marougi, Expert Engineer, Keysight Technologies, Santa Rosa, CA
Thursday, February 7, 2019

Abstract - Over the past years, Phase Noise has become critical parameter for the performance of many systems ranging from cellular receivers, high-speed digital systems, and target detection and identification systems. Currently, Phase Noise is a very important design parameter for all top-of-the line signal generators and frequency synthesizers. In this seminar, Phase Noise will be defined and explained in simple terms. The various methods and concepts used to quantify Phase Noise in time and frequency domains will be defined and explained. The frequency domain approach in quantifying and measuring Phase Noise will be will be emphasized and explained in detail because it is the most accurate and repetitive approach for characterizing Phase Noise. Different practical methods used in measuring Phase Noise will be explained and compared. The design of commercially available test instruments is also explained and compared to understand merits and limitations.

Dr. Salem Marougi is with the Signal Sources Division of Keysight Technologies. He has over twenty-two years of experience working on various RF and Microwave assemblies and products. He started his career with Hewlett-Packard Company, then continued with Agilent Technologies and currently he is with Keysight Technologies. Before joining the Hi-Tech Industries, Dr. Marougi was University Professor at various Institutions. He also has taught for the University of California- Berkeley continuous education courses for over twelve years on topics related to Phase-Locked Loops and Phase Noise. He also has provided consultations and training to various Hi-Tech companies. Dr. Marougi has acquired extensive experience in the Test and Measurement Industries where he worked on various RF receivers, Modular Systems, Spectrum

Upcoming Lectures

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