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报告题目:	Signal Processing Everywhere—a Perspective on Synergies with Allied Fields, and Opportunities in Applications
报告人:	Prof.
	University of Minnesota, USA
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## Abstract:

Signal processing techniques and technologies are truly ubiquitous in the devices and services that we take for granted in this age of information. The Field of Interest (FOI) of the IEEE Signal Processing Society <a href="http://www.signalprocessingsociety.org/about-sps/scope-mission/">http://www.signalprocessingsociety.org/about-sps/scope-mission/</a> succinctly describes the fundamental components and aims of what is, and likely to be in the foreseeable future, broadly defined as signal processing. This statement also highlights the blurred lines and convergence of approaches with a number of other fields such as computing, information theory, communications and networking, and machine intelligence.

This talk will provide a perspective on the history of the development of modern signal processing as manifested in the growth and technical diversification of the IEEE Signal Processing Society. A number of examples are provided to illustrate the trends in the field and some likely future directions made possible by developments in sensing, computational and communication technologies, and opportunities ranging from entertainment to grand challenge problems in energy and health care.

## **Biography:**

**Dr. Mos Kaveh** is the Centennial Professor of Electrical and Computer Engineering at the University of Minnesota, and the Associate Dean for Research and Planning for the University's College of Science and Engineering. His research and education activities have been on a variety of issues in signal and image processing and digital communications, including the processing of sensor array signals, image reconstruction and tomography and wireless communication systems utilizing multiple antennas.

Dr. Kaveh is the President of the IEEE Signal Processing Society (SPS) for 2010-2011, and has served this First Society of the IEEE in a number of editorial and leadership positions over the past three decades. His recognitions and honors from the IEEE include Fellow of IEEE, a 1986 IEEE ASSP Senior (best paper) Award, the 1988 IEEE ASSP Meritorious Service Award, an IEEE Third Millennium Medal, and the 2000 Society Award as the highest honor awarded by the IEEE Signal Processing Society.

At University of Minnesota, Dr. Kaveh oversees a vibrant research enterprise supported by more than \$115 million in annual research expenditures from external funding sources. The scholarly work at his College of Science and Engineering is carried out in 12 academic departments and their numerous research centers and laboratories, two free-standing graduate programs, and 16 collegiate research centers and facilities. Prior to taking on the Associate Dean duty, he has served as the Head of the Department of Electrical and Computer Engineering at the University of Minnesota.

Dr. Kaveh also serves as a member of advisory boards or review committees of several electrical and computer engineering departments and research centers, and has consulted for industry, including the MIT Lincoln Laboratory, 3M, and Honeywell. He is a recipient of a 2002 Outstanding Electrical and Computer Engineer Award from Purdue University.