

**Kailath Lecture and Colloquium 2015**  
**September 17-18, Clark Center Auditorium Stanford University**

<b>Thursday September 17</b>	<b>Friday September 18</b>
<b>8:00 - 8:50 AM Registration</b>	<b>9:00 - 11:00 AM Prof. KVS Hari, Chair</b>
<b>9:00 - 9:30 AM Introduction: Profs Roychowdhury and Kailath</b>	1. Mati Wax: <i>Multipath Fingerprinting: Exploiting multipath for Accurate Indoor Localization</i>
<b>9:30 - 11:00 AM Prof. Roychowdhury, Chair</b>	2. Lee Swindlehurst (UCI): <i>Physical Layer Security Games</i>
1. Freddy Bruckstein (Technion): <i>From Ants to A(ge)nts</i>	3. Lang Tong (Cornell): <i>Renewable and Storage Integration in Distribution Networks: Is Consumer-Based Integration Good for Consumers?</i>
2. Ali Sayed (UCLA): <i>How well can we learn over networks?</i>	4. Sailesh Rao (Arizona): <i>Healing the Climate</i>
3. George Verghese (MIT): <i>Physiological Modeling and Estimation for Bedside Informatics</i>	5. Juan Jover (Miami): <i>Great Ideas and Beautiful Minds</i>
<b>Break 11:00 - 11:30 AM</b>	<b>Break 11:00 - 11:30 AM</b>
<b>11:30 AM - 12:30 PM Prof. Varvarigou, Chair</b>	<b>11:30 AM - 12:30 PM Prof. Bolcskei, Chair</b>
1. H. V. Jagadish (Michigan): <i>The Ethics of Big Data</i>	1. Hanoch Lev-Ari (Northeastern): <i>Geometric Algebra: A "Hyper-Euclidean" Extension of Complex Algebra and Quaternions with application to Monitoring of Electric Power Quality</i>
2. S. Y. Kung (Princeton): <i>Visualization of Big Data</i>	2. Patrick Dewilde (TU Munich): <i>New Insights into LU Matrix Factorization</i>
<b>Lunch 12:30 - 1:30 PM</b>	<b>Lunch 12:30 - 1:30 PM</b>
<b>1:30 - 3:30 PM Prof. Orlitsky, Chair</b>	<b>1:30 - 3:30 PM Prof. Sayed, Chair</b>
1. Vwani Roychowdhury (UCLA): <i>What can Aliens infer about Humans from the Internet?</i>	1. Alon Orlitsky (UCSD): <i>Probability Revisited</i>
2. Theodora Varvarigou (NTU Athens): <i>Edge-Sign Prediction in Social Networks</i>	2. Babak Hassibi (CalTech): <i>Structured Signal Recovery: Where Least-Squares meets Non-smooth Optimization</i>
3. Lennart Ljung (Linkoping, Sweden): <i>Will Machine Learning Change the Paradigm of System Identification?</i>	3. Yuval Bistritz (Tel Aviv University): <i>Fraction-Free inversion and factorization of Toeplitz and quasi-Toeplitz matrices</i>
4. Helmut Bolcskei (ETH, Zurich) <i>Super-resolved system identification</i>	4. Haris Vikalo (UT Austin): <i>Decoding genetic variations: Algorithms for haplotype assembly</i>
<b>Break 3:30 - 4:00 PM</b>	<b>Break 3:30 - 4:00 PM</b>
<b>4:00 - 5:30 PM Kailath Lecture, Prof. Goldsmith, Chair</b>	<b>4:00 PM - 6:00 PM Prof. Paulraj, Chair</b>
Welcome : Prof. El Gamal (EE Chair) and Prof. Kailath; Speaker Introduced by Prof. Yablonovitch (UCB)	1. Bernard Levy (UCD): <i>Direct complex envelope sampling of bandpass signals with nonuniformly interleaved 2-channel ADCs</i>
<b>Prof. Stanley Osher (UCLA): What Mathematical Algorithms Can Do for the Real (and Even Fake) World</b>	2. Erik Verriest (GaTech): <i>LTI - RLC circuits in Willems's behavioral framework</i>
	3. Panel on Entrepreneurship: Prof. Paulraj, Chair N. Gupta, J. Omura, G Sidhu, Guanghan Xu, N Krasner, D Pal, Buno Pati