

Invited Talk – *Gaurav Sukhatme* – University of Southern California,
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Adding Actuation to Sensor Networks: Sensor networks could revolutionize our ability to harvest information from the physical world quickly, efficiently, planetwide. I will argue this in addition to sensing, communication, and computation, a fourth, very important capability is required to materialize this revolution: actuation.

I will describe some of the challenges and payoffs associated with introducing actuation into the mix, thereby extending 'conventional' sensor networks to sensor-actuator networks (or robotic sensor networks). Specifically I will focus on algorithms for localization and deployment which we have recently developed for such networks.