



HUMANITY  
CENTERED  
ROBOTICS  
INITIATIVE



BROWN

# Leslie Pack Kaelbling MIT CSAIL

## "Making Robots Behave"



***Wednesday, April 29, 2015  
12:00 – 1:30 pm  
Barus and Holley Room 190***

The fields of AI and robotics have made great improvements in many individual subfields, including in motion planning, symbolic planning, probabilistic reasoning, perception, and learning. Our goal is to develop an integrated approach to solving very large problems that are hopelessly intractable to solve optimally. We make a number of approximations during planning, including serializing subtasks, factoring distributions, and determinizing stochastic dynamics, but regain robustness and effectiveness through a continuous state-estimation and replanning process. This approach is demonstrated in three robotic domains, each of which integrates perception, estimation, planning, and manipulation.

**Leslie Pack Kaelbling** is at MIT now, but used to be at Brown and remains very fond of it. She is the Panasonic Professor of Computer Science and Engineering at MIT, was on the faculty of the Brown Computer Science Department from 1991 to 1999, and completed her PhD at Stanford while working at Teleos Research and SRI International. She is interested in making truly intelligent robots by integrating perception, inference, planning, learning, and control.