

The role of manipulation primitives in building

Dexterous robotics systems - Alberto Rodriguez.

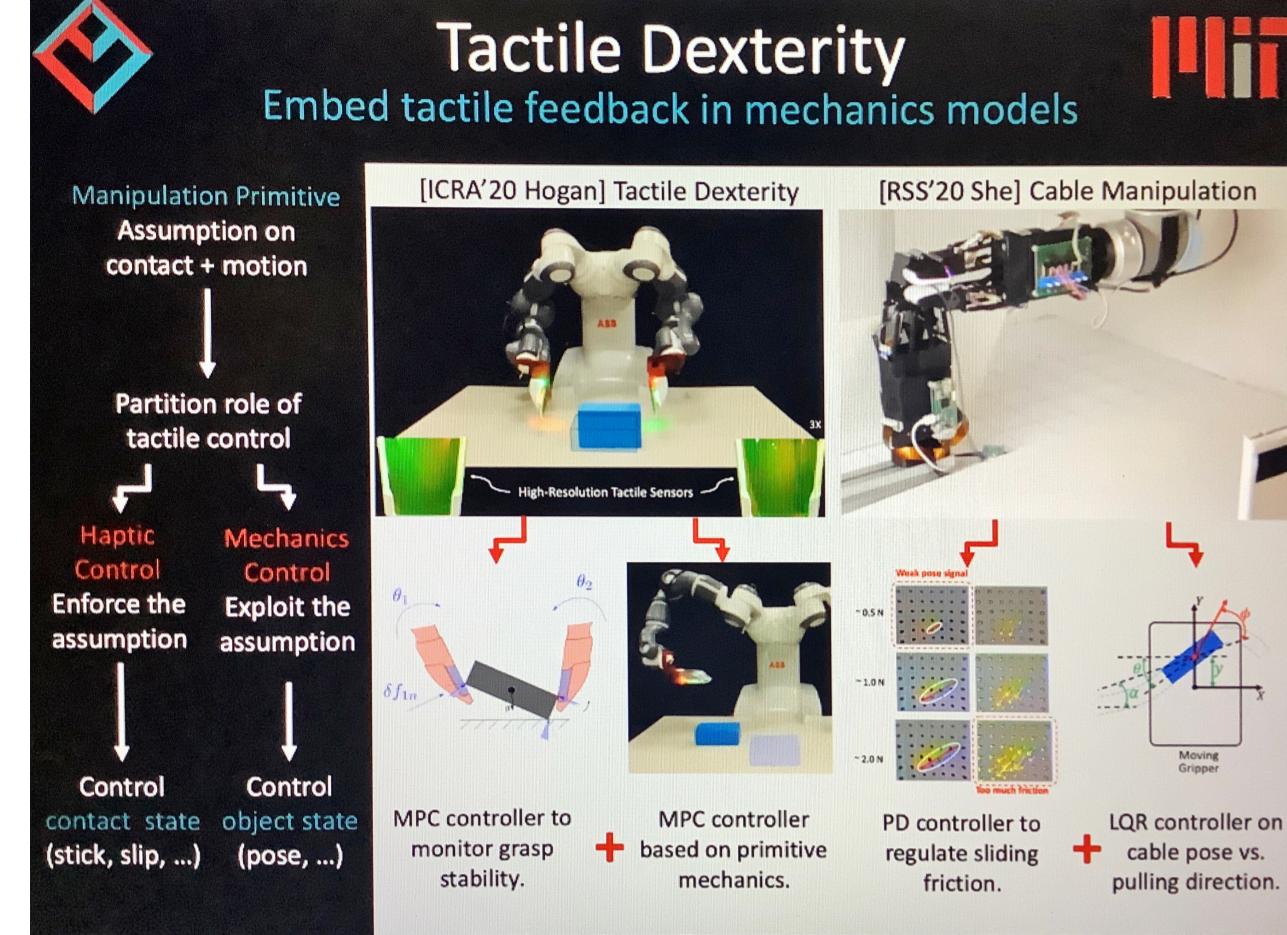
- Manipulation perspectives: decision process challenge research dynamics
- 1. Mechanics - Control. predict, local info under-actuated hybrid friction dynamics ②
- 2. Haptic feedback. react, local info real contact generate forces/velocities ①
- 3. Search - Planning. predict, global info long-horizon behavior real world ③
- 4. Visual feedback. react, global info percept of real objects ④

Manipulation primitives:

Primitive: assumption on contact interaction + object motion.

→ enforce it so that planning and control can exploit it.

①



②

