

# Basic Models for Robot Motion and Perception

Plans

# Plans

A **plan** describes the choices the robot will make.

Plans can take many forms:

- A **sequence** of actions:  $u_1, \dots, u_k$
- A **trajectory**  $t : [0, T] \rightarrow U$
- A **state-feedback policy**:  $\pi : X \rightarrow U$
- An **information-feedback policy**:  
 $\pi : (U \times \dots \times U) \times (Y \times \dots \times Y) \rightarrow U$

# Key idea: There are decisions to make!

There is no “correct” model for your robot.

We must make modeling decisions.

Consider the goals the robot is trying to accomplish and determine what factors play important roles in achieving that goal, and what factors are reasonable to ignore.