

## Discussion Session w. 38

---

- ▶ Topic for discussion session w. 38:  
**Adaptive robot control**

### Literature:

- ▶ Craig, J. J., Hsu, P., & Sastry, S. S.: "Adaptive Control of Mechanical Manipulators". *The International Journal of Robotics Research*, Vol. 6, No. 2, 1987.
- ▶ Slotine, J.-J. E., & Li, W.: "On the Adaptive Control of Robot Manipulators". *The International Journal of Robotics Research*, Vol. 6, No. 3, 1987.
- ▶ Ortega, M., & Spong, M. W.: "Adaptive Motion Control of Rigid Robots: a Tutorial". *Automatica*, Vol. 25, No. 6, 1989.
- ▶ Johansson, R.: "Adaptive Control of Robot Manipulator Motion". *IEEE Transactions on Robotics and Automation*, Vol. 6, No. 4, 1990.

## Discussion Session w. 38 (cont'd)

---

Simulation task:

- ▶ Implement an adaptive robot-control strategy of your choice and evaluate it in simulations using a model of a serial-kinematic robot with two links. In particular, evaluate the control performance for different parameter choices and the convergence properties of the algorithm.