

# Assignments for October 11

- ▶ Read Chapters 13–14 in LaValle, S. M., *Planning Algorithms*, Cambridge University Press, Cambridge, UK, 2006. The chapters discuss topics in motion planning for systems with differential models and constraints.
- ▶ Karaman, S. and Frazzoli, E.: "Sampling-based algorithms for optimal motion planning". Int. J. Robotics Research 30:7 (2011), pp. 846–894.
- ▶ Berntorp, K. and Di Cairano, S., "Particle filtering for online motion planning with task specifications". American Control Conf. (ACC), Boston, MA, 2016, pp. 2123–2128.
- ▶ Danielson, C., Weiss, A., Berntorp, K., and Di Cairano, S., "Path planning using positive invariant sets". Conf. Decision and Control (CDC), Las Vegas, NV, 2016, pp. 5986–5991.

## Assignments for October 11 (cont'd)

- ▶ Berntorp, K., Weiss, A., Danielson, C., Kolmanovsky, I. V., and Di Cairano, S.: "Automated Driving: Safe Motion Planning Using Positively Invariant Sets", 2017. Available at: [/home/robot/courses/motion\\_planning/](/home/robot/courses/motion_planning/)
- ▶ Lecture by Karl Berntorp.