Time Optimal Trajectory Generation (TOTG)

- Most moveit planners output trajectory that needs time parameterization
- Original plugin doesn’t actually respect velocity/acceleration limits
- Really terrible when your arm is very velocity sensitive!
- Consolidation of tickets (at first World MoveIt Day in 2016):
  https://github.com/ros-planning/moveit/issues/160
- Henning Kayser PR in 2019: https://github.com/ros-planning/moveit/pull/809

MoveIt
<launch>

<!-- OMPL Plugin for MoveIt! -->

<arg name="planning_plugin" value="ompl_interface/OMPLPlanner"/>

<!-- The request adapters (plugins) used when planning with OMPL.

ORDER MATTERS -->

<arg name="planning_adapters" value="default_planner_request_adapters/AddTimeOptimalParameterization
default_planner_request_adapters/FixWorkspaceBounds
default_planner_request_adapters/FixStartStateBounds
default_planner_request_adapters/FixStartStateCollision
default_planner_request_adapters/FixStartStatePathConstraints">

...
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What it is

- Better In Melodic and master branch

What it isn’t

- Jerk Limited