**MPC: State tracking**

**System model**

**Modelling**

where: state, output, input

**Prediction**

**Predicted state**

where:

**Optimization**

where:

**Objective function**

where:

**Constraints**

**State constraints**

**Input constraints**

where:

**Input rate constraints**

where:

**Optimization problem (QP)**

where:

**MPC: Control state tracking**