Joint coordinates from P3 to P1 Analytical vs numerical solution 0.2 \dot{q}_1 - analytical [rad/s]0 joint 1 -0.2 $\dot{q}_1 - numerical$ [rad/s] $\ddot{q}_1 - analytical [rad/s^2]$ $\ddot{q_1} - numerical [rad/s^2]$ -0.4 0 2 3 4 5 6 time [s] 0.01 \dot{q}_2 - analytical [rad/s]0 joint 2 10.0- \dot{q}_2 – numerical [rad/s] \ddot{q}_2 - analytical $[rad/s^2]$ -0.02 $\ddot{q}_2 - numerical [rad/s^2]$ 0 2 5 6 time [s] ×10⁻³ 5 \dot{q}_3 – analytical [rad/s]joint 3 0 [rad/s] \dot{q}_3 – numerical -5 \ddot{q}_3 – analytical $[rad/s^2]$ -10 \ddot{q}_3 – numerical $[rad/s^2]$ 1 2 3 4 5 6 time [s]