

# System Identification of Robot Arm

**System description:** a flexible robot arm installed on an electrical motor.

**Single input:** reaction torque of the structure on the ground, in the form of periodic sine sweep.

**Single Output:** angular acceleration of the flexible arm.

**Theoretical relationship:**  $T = a \cdot m \cdot L^2 / 2$ .

a: angular acceleration; M: mass; L: arm length.

**Modelling:**

