Control of a Gantry crane

A common problem in a gantry is suspended in wires is that the load is oscillating when moved.

In the lab a down scaled model of a gantry crane is available. The model has a horizontal girder on which a trolley can move back and forth via a wire system and a second wire system lifting the load. The wires are connected to two dc-motors.

The main topic of this project is to design a control system that allows fast movement of a load from one location to another without oscillation.

The control system can either be used for full automation of the process or to support an operator.

