

## **Description du travail**

### **Description et objectifs**

Develop a novel high precision motorized elevator stage (travel range in Z: 30mm) that will be placed on top of our X & Y motorized

stages.

This stage will be motorized by a DC motor + encoder combo.

The following requirements must be fulfilled:

- travel 30mm
- optimized for slip-stick free movement
- Max size: width 100mm, length 280mm height: 76mm
- Material: deformation resistant aluminium
- Integrated limit switches
- encoder step: <20 nm
- High load capacity: 100N

### **Compétences requises**

DC motor actuator

Cross roller guiding with ultra low friction

Simulation

Mechanical design

**Langues requises** Français (Intermédiaire) , Anglais

(Intermédiaire)

**Localisation du stage** NEUCHÂTEL