

## Electrostatic Kicker at 37kHz and +/-10kV for Muons

*Tuesday 25 April 2023 12:00 (30 minutes)*

Selection of single muons is needed for two experiments at PSI. Four +/- 5kV Switches in a bridge configuration provide a +/-10kV potential for switching muons at a 37kHz rate. A successful system was developed and in operation for 20 years. It relies on a flow of FC77 coolant directly on the transistors in the HV switch to remove ca. 1kW of heat. Unfortunately, the switches were destroyed by a water leak into the coolant. This presentation gives the detailed redesign of the replacement switches.

**Presenter:** GOUGH, Chris (Paul Scherrer Institut)

**Session Classification:** Morning session