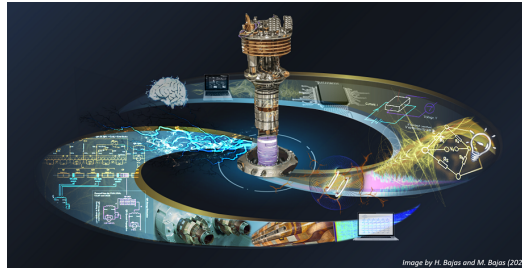


Lectures on Superconducting Magnet Test Stands, Magnet Protections and Diagnostics (as integral part of SMTF & IDSM Workshops)



Contribution ID: 9

Type: **not specified**

Quench protection with external energy extraction

Monday 5 June 2023 16:30 (1 hour)

Topics to be discussed during the lecture:

1. Various techniques to protect the superconducting magnet during quenching.
2. When and why, we need energy extraction.
3. Different configuration of Energy Extraction Circuits.
4. Engineering considerations of Energy Extraction system including power circuit, energy absorbing resistors and high current switches.
5. Detail design of 10kA Energy Extraction Switch using IGBTs in parallel.

Presenter: PIYUSH, Joshi (BNL)