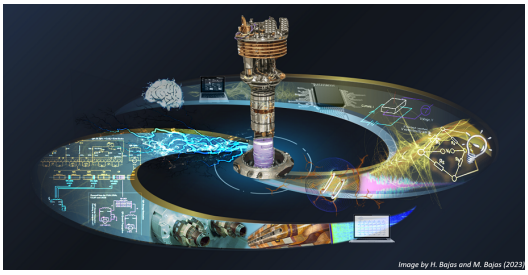

Contribution ID: **7** Type: **not specified**

Electrical integrity tests and electrical failure diagnostics in superconducting circuits

Friday 2 June 2023 16:30 (1 hour)

About the lecture:

Electrical failures in superconducting circuits can cause severe damage to the equipment and even lead to personal injury due to high operating currents. Often a significant energy stored in the magnetic field generated by the superconducting magnets becomes an additional risk factor.

The training course will cover various topics related to electrical integrity tests and electrical failure diagnostics, using examples gathered by Electrical Quality Assurance Team during more than 15 years of experience in electrical testing and nonconformity investigations of the Large Hadron Collider superconducting circuits.

Participants will learn about commonly used types of electrical tests, selection of test parameters, proper management of measurement data, how to troubleshoot electrical failures, and develop a comprehensive plan for electrical testing and diagnosis.

This training course is designed for people working with superconducting circuits, as well as those involved in the design, manufacture, and maintenance of equipment that utilizes superconducting magnets and bus bars. By the end of the course, participants will have a thorough understanding of electrical integrity tests and electrical failure diagnostics and will be able to implement them effectively in their work.

About the speaker:

Jaromir Ludwin is an electrical engineer with background in physics. He's working in the Institute of Nuclear Physics in Krakow, Poland. He's a member of the Electrical Quality Assurance Team at CERN since 2006.

Presenter: LUDWIN, Jaromir (HNINP)