CAS Advanced Accelerator Physics, 10-22 November 2024, Spa, Belgium



Contribution ID: 39

Type: not specified

## **Insertion devices - Technology**

Saturday 16 November 2024 14:30 (1 hour)

This lecture reviews the options for building insertion device magnets. It highlights why permanent magnets are the most popular choice and explains how more complex magnetic field shapes, such as helical, can be generated with simple rectangular permanent magnet blocks. The use of iron is discussed to enhance the performance of insertion devices, as are the engineering challenges of building and adjusting these devices. Finally more exotic examples are discussed, including superconducting magnets and cryogenic permanent magnets.

Presenter: Prof. CLARKE, Jim