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## **[210] Energy Efficiency of Particle Accelerator driven Research Infrastructures**

*Monday, June 27, 2022 6:45 PM (30 minutes)*

Sustainability has become an important aspect of all human activities, including the operation of research infrastructures. This presentation will review the power efficiency and related R&D efforts of accelerator concepts and technologies. The three main categories proton driver accelerators, light sources and particle colliders will be considered. Several technologies are particularly relevant for power efficiency of those facility types. These include superconducting RF and cryogenic systems, RF sources, energy efficient magnets, conventional cooling, heat recovery. Power efficiency has been a topic in the European programs EUCARD-2, ARIES and the ongoing I.FAST, and reference is made to these programs.

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