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Thu-Af-Spec1-06: [Panel 1] Superconducting Rotating Machines

Thursday 3 July 2025 16:45 (5 minutes)

Superconducting magnets are the critical differentiating technology of superconducting rotating machines. High Temperature Superconducting (HTS) rotating machines will revolutionize aero-propulsion aviation, ship propulsion, power generation, industrial motors, and many other applications by providing unmatched efficiency and power density. This panel discussion will focus on the latest advancements, challenges, and prospects of superconducting magnets, particularly their application in rotating machines for energy and transport applications.

The panel will discuss the development of magnets and their integration into transport platforms and power and energy applications, highlighting their significant advantages over conventional technologies. Key topics will include the mechanical and electromagnetic performance of HTS magnets and the challenges that need to be addressed to accelerate the technology's commercial adoption.

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