



Contribution ID: 27

Type: **Oral**

Electrothermal modeling of HTS coils using homogenization and different formulations

Tuesday 11 June 2024 16:00 (20 minutes)

HTS coils are used in various applications, however, it is complicated and time-consuming to model their multiphysics behavior. We have developed a simple homogenized method to accurately simulate HTS coils, in the context of electrothermal quench. Different numerical models are benchmarked for these computations, and they show very good agreement for different configurations of homogenized method.

Topic

Innovative methods and tools for modelling large-scale HTS systems

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Session Classification: Session 2: Innovative methods and tools for modelling large-scale HTS systems