



# 9th International Workshop on Numerical Modelling of High Temperature Superconductors - HTS 2024

## Tuesday, 11 June 2024

### Session 2: Innovative methods and tools for modelling large-scale HTS systems: A (14:00 - 15:00)

time	[id] title	presenter
14:00	[23] Modelling a single-layer CORT cable with coordinate transformation	VANDERHEYDEN, Benoît
14:20	[7] A frequency domain finite element model for simulating high temperature superconductors using the J-A and T-A formulations	TRILLAUD, Frederic Dr DOS SANTOS, Gabriel
14:40	[50] Influence of ferromagnetic structure addition on the field trapping ability of MgB2 bulk samples	GOZZELINO, Laura

### Session 2: Innovative methods and tools for modelling large-scale HTS systems: B (15:30 - 17:00)

time	[id] title	presenter
15:30	[26] Recent Advances in BELFEM and Toward a Community-Driven Material Database for HTS Modeling	Dr MESSE, Christian
16:00	[27] Electrothermal modeling of HTS coils using homogenization and different formulations	DADHICH, Anang
16:20	[31] H-phi Simulations for Pre-Quench and Minimum Quench Energy in HTS Tapes	GIARD, Gregory
16:40	[41] Lumped Parameter Model for Simulation of HTS Cables in Power System Simulators	BATISTA DE SOUSA, Wescley Tiago

# Wednesday, 12 June 2024

## Session 2: Innovative methods and tools for modelling large-scale HTS systems: C (13:30 - 14:30)

time	[id] title	presenter
13:30	[10] Introduction of the magnetic scalar potential $\phi$ in the T-A and J-A formulations for efficient electromagnetic simulations of High Temperature Superconductors	DOS SANTOS, Gabriel TRILLAUD, Frederic
14:00	[28] A physic-guided recurrent machine learning model for long-time prediction of quench dynamics	Prof. SIROIS, Frédéric BREAUULT, Nicolas