



Galileo
Ferraris

Agenda

highlights

Galileo Ferraris' Contest

comparing *data-driven* methodologies
for the *multi-physics* simulation of traction electrical machines

Simone Ferrari ¹, Gianmario Pellegrino ¹, Costanza Anerdi ¹,
Fabio Freschi ¹, Luca Giaccone ¹, Gianmarco Lorenti ¹,
Maurizio Repetto ¹, Luigi Solimene ¹, Piergiorgio Alotto, ²,
Francesco Lucchini, ², Riccardo Torchio, ²,

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Politecnico
di Torino

Dipartimento Energia
"G. Ferraris"



December 11, 2024

Agenda of the 1st GalFer Contest workshop



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- ① What is GalFer Contest?, Prof. M. Repetto
- ② Workflow process creating the datasets
 - magnetic analysis, Dr. S. Ferrari
 - elastostatic analysis, Dr. C. Anerdi
 - thermal analysis, Dr. R. Torchio
- ③ Multicriteria evaluation of electric motors, Dr. L. Solimene
- ④ Ranking procedure and Awards, Prof. M. Repetto
- ⑤ Focus on preliminary teams' work and possible problems emerging in dataset handling, free discussion

approximate length of meeting 1 hour ...

meeting is recorded and will be made available ...



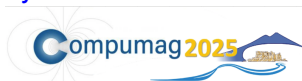
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- idea coming from the COMPUMAG Conference environment

award ceremony will be held next June in Naples at



- focus on electrical machines for e-mobility
 - Multi-physics
 - Multi-objective
- Comparing and assessing Machine Learning and Computational intelligence approaches applied to the design of electrical motors
- Definition of a benchmark problem ...