Mathematical Approaches to Modeling, Optimally Designing, and Controlling Electric Machine

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Message from the Guest Editors

This Special Issue aims to collect papers reporting the mathematical approaches to modeling, optimal design, and control of electric machines. The main topics of this Special Issue include, but are not limited to:

- Analytical models (electromagnetic, thermal, etc.) of electric machines

- Numerical models (finite element method, boundary element method, equivalent circuits, etc.) of electric machines

- Multi-physics models of electric machines

- Lifetime modeling of electric machines

- Losses modeling of electric machines

- Optimal design methodologies of electric machines

- Optimization techniques for fast and efficient optimal design of electric machines

- Offline and online methods for identification of electric machine parameters

- Field-oriented control and direct torque control

- Model predictive control of electric machines

- Self-sensing control of electric machines

- Robust control of electric machines

- Optimal control techniques of electric machines

Special Issue

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Message from the Editor-in-Chief

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