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Special Session on

Vibration and noise issues in electrical machines

Organized and co-chaired by:

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Call for Papers

The vibration and noise issues in electrical machines have been concerned for a long time, and it is still arousing interests in many applications such as electrified transportation, industrial drives, household appliances, etc. Whereas, its generation mechanism and suppression method are still complicated for machine designers and manufacturers.

As is well known, the noise and vibration in electrical machine is mainly induced by the electromagnetic (EM) force, and plenty of research papers have been focused on this aspect, especially on the radial EM force. However, recent publications show that the influences of structure geometry modulation, manufacturing errors, current harmonics from the inverter, etc., are considerable. This special session is proposed for the exchange of new ideas in the area of vibration and noise problems in electrical machines, aiming at improving the understanding of its generation mechanism and inspiring new solutions for quiet machines.

Topics of interest include, but are not limited to:

- Generation mechanism of vibration and noise
- Analysis of vibration and noise
- Effect on vibration and noise of manufacturing errors
- Vibration and noise related to the drives
- Motor noise in electrical vehicles
- Optimization/suppression of noise and vibration
- Structure analysis and vibration modes
- Vibration characteristics of new machine topologies

Submission of papers: deadline follows the deadline for the regular papers.

All the instructions for paper submission are included in the conference website:

<http://www.icem.cc/2022>