













SPECIAL SESSION SS07

2020 IEEE 19th International Power Electronics and Motion Control Conference (IEEE-PEMC 2020) will include Special Sessions, which are organized on highly specialized topics within conference scope that were not included in the previous editions of the conference. The organizers of those sessions must observe the scope of the conference and submit session proposal to the Conference secretariat for acceptance. Please provide data of the session included in the form below. At least one (and max. two) session organizer is required to provide contact data and short biography.

Session details:

Session title: Machine Learning in Power Electronics Systems

Session description (session scope, novelty, goals; 100-200 words):

Power electronics converters use measurements to implement various control Machine learning, data acquisition, strategies. This data can be coupled with machine learning techniques to train models which can be used to estimate system parameters, estimate converter aging or other monitoring/diagnosis functions.

This session calls for contributions on this type of applications. Contributions can be on the type of learning algorithm used, how to salvage data and etc.

Keywords, topics:

monitoring, diagnosis

Organizer(s) details:

First (main) organizer (title, name and surname): Assoc. Prof. Luiz Fernando Lavado Villa

E-mail: luiz.villa@laas.fr Affiliation: University of Toulouse, LAAS-CNRS, France

Short bio: Dr. Villa is associate professor in the field of power electronics. His main interest is the use of machine learning techniques associated with power electronics converters to achieve planned perennity in energy conversion.

Second (optional) organizer (title, name and surname):

E-mail: Click or tap here to enter the text. Affiliation: Click or tap here to enter the text.

Short bio: Click or tap here to enter the text.

Conference secretariat:

IEEE-PEMC2020 Department of Power Electronics, **Electrical Drives and Robotics** B. Krzywoustego 2, 44-100 Gliwice, Poland

tel.: +48 32 237 12 47, +48 32 237 13 04 E-mail: ieee-pemc2020@polsl.pl

Applying for special session

The proposal for a special session should be sent by Special Session Organizers via e-mail to the conference secretariat by the deadline (15.12.2019). Within two weeks Special Session Organizers will be notified on the acceptance of their proposal. In case of acceptance, sessions organizers will request the authors of their invited contributions to submit their papers by the due date as advised on the conference web site.

