Data-Driven Modelling of Nonlinear Dynamic Systems

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

The data-driven modelling of nonlinear dynamic systems, also known as nonlinear system identification, is a science and engineering field that is progressing incredibly quickly.

This Special Issue of *Vibration* intends to provide an up-to-date snapshot of the most exciting and popular research trends in the field. A non-exhaustive list of subjects of interest could be formulated as follows:

- Input design for nonlinear data-driven modelling.
- Nonparametric data analysis towards model structure selection.
- Machine learning mappings in nonlinear data-driven modelling.
- Uncertainty quantification in nonlinear data-driven modelling.
- Analysis, reduction and interpretation of nonlinear data-driven models.
- Nonlinear model-based control.
- Nonlinear model-based design.
- Complex real-life applications.

Dr. Jean-Philippe Noël
Guest Editor

Special Issue