



Applications Based on Symmetry/Asymmetry in Structural Dynamics

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Structural dynamics refers to a type of analysis that covers the behavior of a structure after exposure to dynamic excitations. Symmetry/asymmetry in structural dynamics can be considered among the most important notions in determining the behavior of a physical structure when subjected to force. In this regard, it should be expressed that the investigation of applications based on symmetry/asymmetry in the structural analysis of dynamic structures is very important in engineering applications such as submarines, rocket fuel tanks, satellite support structures, missiles, underwater toroidal pressure hull, and fusion reactor containers. It is therefore no surprise that a large number of researchers have been investigating the structural analysis of these structures under various dynamic excitations for decades.

The aim of the present Special Issue is to investigate the application of symmetry/asymmetry in the dynamic structures, which can be extremely useful in engineering and mechanical applications. For instance, symmetry analysis in structural dynamics can help researchers to identify mode localization and energy transfer mechanisms...





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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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