



Time and Space Nonlocal Operators in Structural Mechanics

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Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to collect advanced developments in the application of nonlocal operators to various engineering and physics problems with special regard to structural mechanics. The authors could contribute to expanding the knowledge about structural modeling by advanced mathematical operators. The manuscripts could consider time-dependent mechanical behaviors, nonlocal elasticity, size effects, peridynamics, and all those problems in which nonlocal operators can be used. Contributions in physics, materials science, solids mechanics, biomechanics, dynamics of structures, nanomechanics, diffusion or transport problems are particularly encouraged. Authors may discuss theoretical aspects, computational methods, modeling techniques, interpretation of experimental data, and simulation issues. All papers providing an interesting improvement of the application of nonlocal operators in engineering problems will be welcome. Suggested topics: statics and dynamics of systems ruled by nonlocal operators; constitutive laws of advanced materials; linear and nonlinear viscoelasticity; nonlocal elasticity; micro- and nanomechanics; strain gradient formulations...





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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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