Special Issue

Symmetry in Mathematical Theory and Simulation Methods for Backward Problems

Message from the Guest Editor

Backward problems have been investigated in science, mathematics, and engineering, and reveal an unknown property of an object from their experimentation or observation. Backward problems conform to the *Symmetry* journal's ideology as they are the opposite of the associated forward issue, which concerns the cause–effect relationship. Backward problems have a wide range of applications, including mechanics, heat conduction, acoustics, semiconductors, medical imaging, nondestructive testing, physics, systems biology, finance, robotics, computer vision, radar, thermoelastics, and groundwater. This Special Issue of *Symmetry* concentrates on the present mathematical theory and simulation regarding backward problems and how they relate to their applications in engineering and science.

Guest Editor

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About the Journal

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.

Editor-in-Chief

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