Applications of Differential Geometry to Continuum Mechanics

Guest Editors:

Prof. Dr. David Steigmann
Department of Mechanical
Engineering, University of
California, Berkeley, CA 94720,
USA

Prof. Dr. Francesco Dell'Isola
Dipartimento di Ingegneria Civile,
Edile-Architettura e Ambientale,
International Research Center
M&MoCS, Università degli Studi
dell'Aquila, 67100 L'Aquila AQ,
Italy

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Message from the Guest Editors

Dear Colleagues,

Continuum mechanics is firmly grounded in the mathematical disciplines of tensor analysis and differential geometry conceived by Ricci and Levi-Civita. This Special Issue is dedicated to highlighting the essential role played by these disciplines in illuminating and unifying various mathematical models of material behavior. The papers collected in this Special Issue represent the efforts of a number of mechanicians whose work emphasizes the methods of tensor analysis and differential geometry.

Prof. Dr. David Steigmann
Prof. Dr. Francesco Dell'Isola
Guest Editors

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Special Issue

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov
1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain
2. Institute of Space Sciences (ICE-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

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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