Special Issue

Advances of Mathematical Modeling in Fluid Mechanics

Message from the Guest Editor

The mathematical modeling of fluid mechanics has great relevance, mainly due to the multiple applications of statics and fluid flow in the process industry. Although advances in experimental techniques make it possible to predict fluid flow in some applications, experimental methods cannot reveal in detail all the physical mechanisms behind fluid flow. Therefore, it is necessary to develop modeling and simulation techniques to better understand the physics of fluid flow. Mathematical modeling and simulation are useful for obtaining detailed information that cannot be revealed from experiments, as well as for examining the effect of various physical parameters on fluid flow behavior. This Special Issue focuses on the recent advances of mathematical modeling in fluid mechanics, emphasizing its recent developments and its use in many industrial and academic applications. We welcome papers on new modeling techniques that address the key issues and difficulties inherent in simulating fluid mechanics.

Guest Editor

Prof. Dr. Alejandro Zacarías

ESIME Azcapotzalco, Instituto Politécnico Nacional, Av. de Las Granjas No. 682, Col. Santa Catarina, Mexico City 02250, Mexico

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Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Humberto Bustince
Department of Statistics, Computer Science and Mathematics, Public University of Navarra, 31006 Pamplona, Spain

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