Special Issue

Advances and Trends in Mathematical Modelling, Control and Identification of Vibrating Systems

Message from the Guest Editors

It is well known that vibrations can be found in many dynamic engineering systems. Mathematics plays a significant role in the analysis, design, and control of vibrating systems. This Special Issue aims at introducing novel results on mathematical modelling, system identification, damage detection and control of vibrations for a wide range of applications of mechanical, electric, electronic, and civil engineering systems. In this context, important advances on both theoretical and experimental studies are welcome. Potential topics include but are not limited to mathematical modelling, vibration control, system identification, vehicle suspensions, dynamic vibration absorbers, rotordynamics, modern energy conversion systems, modal analysis, engineering structures, finite element analysis, numerical methods, and other engineering applications and theoretical developments in which the presence of oscillations constitutes a relevant issue.

Guest Editors

Prof. Dr. Francisco Beltran-Carbajal Prof. Dr. Julio Cesar Rosas Caro Dr. Juan M Ramirez Dr. Roberto Salvador Félix Patrón

Deadline for manuscript submissions

closed (31 December 2021)



an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/79726

Mathematics Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 mathematics@mdpi.com

mdpi.com/journal/ mathematics



Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mathematics



About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).