



Advanced Approaches to Mathematical Physics Problems

Guest Editor:

Prof. Dr. Alexander G. Ramm

Mathematics Department,
Kansas State University,
Manhattan, KS 66506-2602, USA

Deadline for manuscript
submissions:

30 November 2024

Message from the Guest Editor

This Special Issue concentrates on the following three topics:

1. Wave scattering by many small bodies and the creation of materials with a desired refraction coefficient. Many-body wave scattering is a major problem in mathematical physics. The assumption that $a \ll d \ll \lambda$, where a is the characteristic size of the small bodies, d is the minimal distance between the bodies and λ is the wavelength, allows one to give an asymptotically exact solution of the many-body scattering problem when multiple scattering is essential.
2. Analysis of the Navier–Stokes equation, which is one of the greatest problems in mathematical physics. This Special Issue addresses proof of the contradictory nature of the Navier–Stokes problem (NSP) in the three-dimensional space without boundaries and the NSP paradox, which solves one of the Millennium Prize Problems.
3. Boundary values of analytic functions and singular integral equations in spaces of summable functions.





an Open Access Journal by MDPI

Editor-in-Chief

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

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

Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
X@MathematicsMDPI