

Special Issue

Development of Mathematics for Cryptology

Message from the Guest Editors

New technological solutions for smart cities and all different fields of applied sciences, prompts for improved methods for secure management of data. Papers which address this issue would be very welcome. Methods preserving integrity, ensuring authenticity and guaranteeing secrecy in communication via emerging IOT devices as well and in cloud services are demanded in a variety of applications. Currently, RSA and AES are among the dominating methods of cryptography for various purposes. These provide satisfying security in many cases, but for lightweight demands other techniques may be preferable. New ideas include one-way functions that enable quick information management with strong requirements against reverse engineering. Additionally, the potential threat from the quantum computer poses new demands for security, mainly regarding cryptography and steganography. Still, new achievements in cryptanalysis and steganalysis may be made by combining mathematics and low-level quantum computer programming. All contributions concerning the topic of mathematics applied to cryptology and related subjects are very welcome!

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Deadline for manuscript submissions

closed (31 July 2024)



Mathematics

an Open Access Journal
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Impact Factor 2.2
CiteScore 4.6



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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.

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