

Special Issue

Mathematical Problems in Rock Mechanics and Rock Engineering

Message from the Guest Editors

With the increasing requirements for energy, resources and space, numerous rock engineering projects are more often being constructed and operated in large-scale environments with complex geology. Meanwhile, rock failures and rock instabilities occur more frequently, and severely threaten the safety and stability of rock engineering projects. It is well-recognized that rock has multi-scale structures, from minerals, particles, fractures, fissures, joints, and stratification, to fault, and involves multi-scale fracture processes. Meanwhile, rocks are commonly subjected simultaneously to complex static stress and strong dynamic disturbance. Therefore, our understanding of rock mechanics and the prevention and control of failure and instability in rock engineering needs to be furthered. The primary aim of this Special Issue is to bring together original research discussing innovative efforts regarding in situ observations, laboratory experiments and theoretical, numerical, and big-data-based methods to overcome the mathematical problems related to rock mechanics and rock engineering. Submissions showcasing the latest developments in this field are welcome.

Guest Editors

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Deadline for manuscript submissions

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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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