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Recent Advances in Computational Mathematics and Applications

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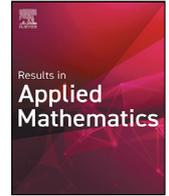
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Recent advances in computational mathematics and applications

We are honored to bring you this special issue dedicated to recent advances in computational mathematics and applications in science and engineering.

The papers in this special issue were presented in "Conference on Computational Mathematics and Applications (CCMA)" held at the University of Nevada Las Vegas (UNLV) during October 25–27, 2019. The conference has attracted about 90 attendees from six countries.

The 15 papers in the special issue comprise a diverse collection of theoretical numerical analysis as well as applications in various subjects. Topics cover optimal control of PDEs, discontinuous Galerkin methods, fluid flow in porous media, turbulence flow, static and moving interface problems, complex fluids composed by the mixture of Newtonian fluid and nematic (liquid crystal) flows, modeling of ocean–atmosphere system, image segmentation algorithm, uncertainty quantification problems for turbulence model and Maxwell's equations, iterative solver for systems resulting from mixed methods, and novel methods for solving systems of nonlinear equations.

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