Special Issue

Symmetry and Approximation Methods II

Message from the Guest Editor

Contributions are welcome on any subject related to Padè approximants with applications to realistic problems in addition to on any subject related to renormalization group applications in physics, finance, and geophysics. Tentative contents:

- Padè and two-point Padè—interpolation, extrapolation, and bounds;
- Euler-transformed, modified Padè approximants and corrected Padè approximants;
- Self-similarity and renormalization group as the source of roots, factors, and superexponential approximants;
- Nonperturbative conditions for accelerating convergence and optimization with minimal differences and sensitivity conditions;
- Factor and root approximants, examples of factors and roots, and interpolation as well as critical point calculations;
- Direct methods for critical index calculations: factors, D-Log Padè, D-Log roots, combined Log–Padè approximants, and test examples;
- Critical index as a control parameter and calculation with roots;
- Accelerated convergence of factors and D-Log Padè approximants;
- Additive and D-Log additive approximants for interpolation...

Guest Editor

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Deadline for manuscript submissions

31 August 2025

About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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