# Special Issue

# Symmetry in the Numerical Resolution of the Elliptic Monge-Ampere Equation

## Message from the Guest Editor

The Monge-Ampere equation is a fully nonlinear partial differential equation which appears in a wide range of applications, e.g., optimal transportation and reflector design. One notion of the weak solution of the equation is based on the old technique of approximation by smooth functions. For smooth solutions, the equation consists in prescribing the determinant of the Hessian matrix, a symmetric matrix field. This Special Issue of Symmetry features articles with proven convergence proofs for smooth solutions and numerically robust to handle non smooth solutions.

### **Guest Editor**

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## Deadline for manuscript submissions

closed (31 December 2015)



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## 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.

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