

# Call for Papers

The Visual Computer



Editor-in-Chief: N. Magnenat-Thalmann

<http://www.springer.com/journal/371>

## Special Issue on Geometric Modeling and Learning for Visual Data Analysis

### 1. Scope

Geometry is a traditional mathematical modeling tool for solving many real-world problems. It has played a key role in computer graphics, computer-aided design and other related applications since the computer emerged. Geometrical analysis has also been applied to other types of visual data, including natural images, biomedical images, videos, visualized data, etc. Nowadays, as the visual data grow rapidly, it attracts more and more researchers to solve the accompanying problems. Results developed over the last few years have shown that it is possible to exploit the representational power of geometric models to help solve the problems on visual data. We have witnessed significant progress in computer vision and image analysis, which is achieved by mining potential geometric information and relationships. On the other hand, the large amount of visual data makes it possible to utilize statistical and machine learning methods to discover good structures and parameters of geometric models. This special issue will bring the recent advances in geometric analysis for visual data to the interested readers.

### 2. Topics

For this special issue, authors are invited to submit original research papers and high-quality overview and survey articles on topics including, but not limited to:

#### Methodology

- Geometric modeling of visual data
- Meshing and Shape analysis from visual data
- Differential geometry for visual data
- Dynamic modeling of geometric structures
- Parameter and/or structure learning for geometric models

#### Applications

- Computer graphics
- Computer vision & Image processing
- Multimedia signal processing
- Visualization
- Biomedical image analysis
- User interaction and games

### 3. Important Dates

- Submission Deadline: April 30, 2015
- First Round Decisions: June 30, 2015
- Revisions Deadline: August 15, 2015
- Final Round Decisions: September 30, 2015

### 4. Submission Guidelines

Instructions for paper preparation and submission are available at the Visual Computer's website.

Authors should

- Register a TVC account via the Editorial System: <http://www.editorialmanager.com/tvcj/>
- Submit the manuscript to TVC by choosing article type "S.I.: Geometric Modeling and Learning for Visual Data Analysis".

### 5. Guest Editors

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