# 2016 Symposium on Solid & Physical Modeling (SPM)

June 20-24, 2016 - Berlin, Germany

http://www.geometrysummit.org/spm2016/

#### **General Information**

The Symposium on Solid and Physical Modeling 2016 (SPM 2016) will be co-located in Berlin with Shape Modeling International (SMI) and the Symposium on Geometry Processing (SGP) as part of the Geometry Summit in 2016. SPM seeks high quality, original research contributions that strive to advance all aspects of solid and physical modeling, and their application in design, analysis and manufacturing, as well as in biomedical, geophysical, digital entertainment, and other areas. The symposium is organized with the support of the Solid Modeling Association (SMA), which, during the conference, will award the 2016 Pierre Bézier Prize for contributions to solid, shape, and physical modeling. Two days prior to the conference a summer school for graduate students and younger researchers is organized.

## **Conference Topics**

We invite submissions on the theoretical, representational, computational, and application issues related, but not limited, to the following topics:

- 3D fabrication/printing/manufacturing technologies
- Applied algebraic and differential geometry
- Applied computational geometry and topology
- Conceptual, collaborative, and distributed design
- Curve, surface, and manifold modeling
- Dimensioning and tolerancing
- Feature modeling, recognition, and understanding
- Geometric and topological representations of shape
- Geometric constraint solving and parametric modeling
- Geometric interpolation and smoothing

- Geometry compression and transmission
- Isogeometric analysis
- Meshing and mesh processing
- Multi-resolution modeling
- Numerical analysis of geometric algorithms
- Physically-based simulation and animation
- Product data exchange, standards, and interoperability
- Reverse engineering/reconstruction of surfaces/solids
- Robustness and validity of geometric computations
- Shape modeling, synthesis, and analysis

#### Examples of applications areas:

- Biomedical/biochemical/geo-scientific applications
- Computer-aided design/manufacturing/engineering
- Robotics and automation

- Prototyping and manufacturing technologies
- Animation, games and virtual reality

#### Paper/Poster Submission

SPM solicits papers that present previously unpublished, original results and that are not simultaneously submitted elsewhere. All papers will be rigorously peer-reviewed by members of the international program committee and, if accepted, will be published as a journal special issue in *Computer-Aided Design* (Elsevier). The journal status of the proceedings requires a two-stage review process with conditional acceptance after the first round and final acceptance based on the revised submissions. In addition, SPM will have a joint poster session with SMI and SGP and will accept proposals for posters in the form of abstracts.

## **Important Dates**

Paper abstracts due: January 31, 2016 Complete papers due: February 7, 2016 First review notification: April 1, 2016 Revision of conditionally accepted papers due: April 17, 2016 Final notification of acceptance: April 24, 2016 Camera ready papers due: May 1, 2016 Poster abstracts due: May1, 2016 Summer school: June 18-19, 2016 Conference / Geometry summit: June 20-24, 2016

## **Organizing Committee**

General Chair: Konrad Polthier (Freie Universität Berlin)
Program Co-chairs: Mario Botsch (Bielefeld University),

Stefanie Hahmann (University of Grenoble), Scott Schaefer (Texas A&M University)