SPM 2020 Editorial

The 2020 Symposium on Solid and Physical Modeling (SPM 2020) was held in Strasbourg, France, from Tuesday, June 2 to Thursday, June 4, 2020. The SPM conference was collocated with the Shape Modeling International (SMI). Due to the Covid-19 outbreak, physical participation was not possible and both events were held as virtual conferences.

The SPM has a long tradition since 1991 and is considered a top event for disseminating research results and exchanging new ideas in the areas of solid and physical modeling, geometric design, analysis, meshing, reverse engineering, and 3D fabrication, to name a few.

The SPM call for papers attracted 117 abstracts and subsequently 88 full paper submissions underwent a double-blind review process. Each submission was assigned to at least three reviewers from the SPM International Program Committee (with 84 members equally representing Europe, Asia, and North America). After being revised by the authors, conditionally accepted papers underwent a second round of reviews. A total of 21 papers were selected for plenary presentations at the conference and published as full papers in a special issue in the Computer-Aided Design (Elsevier) journal. Additionally, four papers were recommended as fast-track submissions to Computer-Aided Design, pending a major revision.

All 21 papers were presented at the SPM conference, including one invited paper recently published in Computer-Aided Design. The SPM and SMI also organized a joint poster session. In total six posters were presented at the common poster session.

There were four common SPM and SMI plenary lectures given by the leading scientists in the field: Xiaoping Qian (University of Wisconsin-Madison), Sylvain Lefebvre (INRIA), Mario Botsch (University of Bielefeld), and Maks Ovsjanikov (École Polytechnique). During the conference, the 2020 Pierre Bézier Award of the Solid Modeling Association was awarded to Dinesh Manocha (University of Maryland) who gave a plenary Bézier Awardee lecture.

We would like to acknowledge the efforts and contributions of the many people who helped to make this conference a success. The participants, authors, and international program committee members, whose contribution has led to this special issue on solid and physical modeling. We are also grateful to the conference co-chairs Hyewon Seo, Frederic Cordier, and Charlie C.L. Wang for their support and help with a difficult task of organizing the program according to various timezones of the speakers, and for the synergy with the SMI. Our special thanks belong to Vadim Shapiro, the Editor in Chief of Computer-Aided Design, and to the entire Elsevier support team for the production of this special issue.

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