Preface of the 29th International Workshop on
Concurrency, Specification and Programming
(CS&P 2021)

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The 29th International Workshop on Concurrency, Specification, and Programming 2021 (CS&P’21) is one of a series of seminars formerly organized every even year by Humboldt Universität zu Berlin and every odd year by Warsaw University. Due to the corona pandemic, this order has now been inverted. CS&P deals with the formal specification of concurrent and parallel systems, mathematical models for describing such systems, and programming and verification concepts for their implementation.

The workshop has a tradition dating back to the mid-seventies; since 1993 it was named CS&P. During almost 30 years, CS&P has become an important forum for researchers from European and Asian countries.

In 2020, the tradition was interrupted; there was no CS&P conference, and CS&P’20 was postponed to September 2021 and renamed to be CS&P’21. The event was held hybrid, both as an online event and as an on-site conference with physical meeting of the participants. The on-site meeting took place at GFaI e.V., the society for the advancement of applied informatics (Gesellschaft zur Förderung der angewandten Informatik), in Berlin-Adlershof, Germany.

This volume contains the 16 talks selected by the program committee, plus abstracts of the two invited talks of the workshop. The program of CS&P’21 reflects the current trends in its field: there are “classical” contributions on the theory of concurrency, specification and programming such as event/data-based systems, cause-effect structures, granular computing, and time Petri nets. However, more and more papers are also concerned with artificial intelligence and machine learning techniques, e.g., in the set of pairs of objects, or with sparse neural networks. Moreover, application areas such as the prediction of football games results, the classification of dry beans, or the care for honeybees are in the focus of attention. Furthermore, this volume contains several papers on software quality assurance, e.g., fault localization and automated testing of software-based systems. Altogether, we hope that you will find the collection to constitute an interesting read and to offer many connecting factors for further research.

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