

Preface

This volume features the accepted publications of the 14th International Conference on Formal Concept Analysis (ICFCA 2017), held during June 13–16, 2017, at IRISA, Rennes. The ICFCA conference series is one of the major venues for researchers from the field of formal concept analysis (FCA) and related areas to present and discuss their recent work with colleagues from all over the world. Since its first edition in 2003 in Darmstadt, the ICFCA conference series has been held in Europe, Australia, America, and Africa.

The field of FCA originated in the 1980s in Darmstadt as a subfield of mathematical order theory, with prior developments in other research groups. Its original motivation was to consider *complete lattices* as *lattices of concepts*, drawing motivation from philosophy and mathematics alike. FCA has since then developed into a wide research area with applications far beyond its original motivation, for example, in logic, data mining, learning, and psychology.

The FCA community is mourning the passing of Rudolf Wille on January 22, 2017, in Bickenbach, Germany. As one of the leading researchers throughout the history of FCA, he was responsible for inventing and shaping many of the fundamental notions in this area. Indeed, the publication of his article “Restructuring Lattice Theory: An Approach Based on Hierarchies of Concepts” is seen by many as the starting point of FCA as an independent direction of research. He was head of the FCA research group in Darmstadt from 1983 until his retirement in 2003, and remained an active researcher and contributor thereafter. In 2003, he was among the founding members of the ICFCA conference series. In memory of Rudolf Wille’s contribution to the foundations of FCA, and in the tradition of previous conference proceedings, this volume contains a historical paper from the early days of FCA (1986), namely “Implikationen und Abhängigkeiten zwischen Merkmalen” by Bernhard Ganter and Rudolf Wille, together with a translation by Daniel Borchmann and Juliane Prochaska, authorized by Bernhard Ganter.

For the proceedings of this year’s ICFCA, out of 37 submitted papers, 13 were chosen to be published in this volume, resulting in an acceptance rate of around 35%. Additionally, four papers were judged mature enough to be discussed at the conference and are included in a supplementary volume titled “Contributions to ICFCA 2017,” published by the University of Rennes 1.

In addition to the regular contributions, this volume also contains the abstracts of the four invited talks at ICFCA 2017 as well as an invited contribution titled “An Invitation to Knowledge Space Theory.” In this article, the authors again want to draw attention to the close links between FCA and *knowledge space theory*, a successful theory from psychology on how to learn.

This proceedings volume would not have been possible without the valuable work of the authors, the members of the Program Committee, and the members of the Editorial Board. Many thanks also go to the external reviewers, who provided valuable

feedback across the board. We also want to express our gratitude to the team of local organizers, who made sure that the conference ran smoothly and was a pleasant experience for all its participants. We also thank Springer for sponsoring the Best Young Research Award. Finally, we would like to thank the EasyChair team for providing their system to organize the conference.

June 2017

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Formal Concept Analysis

14th International Conference, ICFCA 2017, Rennes,
France, June 13-16, 2017, Proceedings

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2017, XVIII, 243 p. 79 illus., Softcover

ISBN: 978-3-319-59270-1