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**ICFCA 2012 – International Conference on Formal
Concept Analysis**

Contributions to the 10th International Conference on Formal Concept Analysis
(ICFCA 2012)
May 2012, Leuven, Belgium

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Preface

This volume contains the papers presented at the 10th International Conference on Formal Concept Analysis (ICFCA 2012) held from May 7th to May 10th, at the Katholieke Universiteit Leuven, Belgium.

There were 68 submissions by authors from 27 countries. Each submission was reviewed by at least three program committee members, and twenty regular papers (29%) were accepted for the Springer Proceedings. The program also included six invited talks on topical issues: Recent Advances in Machine Learning and Data Mining, Mining Terrorist Networks and Revealing Criminals, Concept-Based Process Mining, and Scalability Issues in FCA and Rough Sets. The corresponding abstracts are gathered in the first section of the Springer volume. Another fourteen papers were assessed as valuable for discussion at the conference and were therefore collected in this volume.

Formal Concept Analysis emerged in the 1980's from attempts to restructure lattice theory in order to promote better communication between lattice theorists and potential users of lattice theory. Since its early years, Formal Concept Analysis has developed into a research field in its own right with a thriving theoretical community and a rapidly expanding range of applications in information and knowledge processing including visualization, data analysis, and knowledge management.

The conference aims to bring together researchers and practitioners working on theoretical or applied aspects of Formal Concept Analysis within major related areas such as Mathematics, Computer and Information Sciences and their diverse applications to fields such as Software Engineering, Linguistics, Life and Social Sciences.

We would like to thank the authors and reviewers whose hard work ensured presentations of very high quality and scientific vigor. In addition, we express our deepest gratitude to all Program Committee and Editorial Board members as well as external reviewers, especially to Bernhard Ganter, Claudio Carpineto, Frithjof Dau, Sergei Kuznetsov, Sergei Obiedkov, Sebastian Rudolf and Stefan Schmidt for their advice and support.

We would like to acknowledge all sponsoring institutions and the local organization team who made this conference a success. In particular, we thank Amsterdam-Amstelland Police, IBM Belgium, OpenConnect Systems, Research Foundation Flanders, and Vlerick Management School.

We are also grateful to Katholieke Universiteit Leuven for publishing this volume and the developers of the EasyChair system which helped us during the reviewing process.

May, 2012

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Organization

The International Conference on Formal Concept Analysis is the annual conference and principal research forum in the theory and practice of Formal Concept Analysis. The inaugural International Conference on Formal Concept Analysis was held at the Technische Universität Darmstadt, Germany, in 2003. Subsequent ICFCA conferences were held at the University of New South Wales in Sydney, Australia, 2004, Université d'Artois, Lens, France, 2005, Institut für Algebra, Technische Universität Dresden, Germany, 2006, Université de Clermont-Ferrand, France, 2007, Université du Québec à Montréal, Canada, 2008, Darmstadt University of Applied Sciences, Germany, 2009, Agadir, Morocco, 2010, and University of Nicosia, Cyprus, 2011. ICFCA 2012 was held at the Katholieke Universiteit Leuven, Belgium. Its committees are listed below.

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Table of Contents

Composition of L-Fuzzy contexts	1
<i>Cristina Alcalde, Ana Burusco and Ramon Fuentes-Gonzalez</i>	
Iterator-based Algorithms in Self-Tuning Discovery of Partial Implications	14
<i>Jose Balcazar, Diego García-Saiz and Javier De La Dehesa</i>	
Completing Terminological Axioms with Formal Concept Analysis	29
<i>Alexandre Bazin and Jean-Gabriel Ganascia</i>	
Structural Properties and Algorithms on the Lattice of Moore Co-Families	41
<i>Laurent Beaudou, Pierre Colomb and Olivier Raynaud</i>	
A Tool-Based Set Theoretic Framework for Concept Approximation	53
<i>Zoltán Csajbók and Tamás Mihálydeák</i>	
Decision Aiding Software Using FCA	69
<i>Florent Domenach and Ali Tayari</i>	
Analyzing Chat Conversations of Pedosexuals with Temporal Relational Semantic Systems	82
<i>Paul Elzinga, Karl Erich Wolff, Jonas Poelmans, Stijn Viaene and Guido Dedene</i>	
Closures and Partial Implications in Educational Data Mining	98
<i>Diego García-Saiz, Jose L. Balcázar and Marta E. Zorrilla</i>	
Attribute Exploration in a Fuzzy Setting	114
<i>Cynthia Vera Glodeanu</i>	
On Open Problem – Semantics of the Clone Items	130
<i>Juraj Macko</i>	
Computing the Skyline of a Relational Table Based on a Query Lattice . .	145
<i>Carlo Meghini, Nicolas Spyratos and Tsuyoshi Sugibuchi</i>	
Using FCA for Modelling Conceptual Difficulties in Learning Processes . .	161
<i>Uta Priss, Peter Riegler and Nils Jensen</i>	
Author Index	174