## Contents

## Keynotes

"Grundlagen von Datenbanken" - a 30 years review (nearly) Rainer Manthey	7
Harvesting, Integrating, and Cleaning Metadata in a bibliographic Information System <i>Ralf Schenkel</i>	8
Workshop Submissions	
Adaptive Data Processing in Heterogeneous Hardware Systems  Bala Gurumurthy, Tobias Drews, David Broneske, Gunter Saake,  Thilo Pionteck	9
Data evolution and migration strategies for NoSQL databases  Mark Lukas Möller	15
Towards Flexible Indices for Distributed Graph Data: The Formal Schema-level Index Model FLuID  Till Blume, Ansgar Scherp	22
Investigations of concept development to improve data quality in research information systems  Otmane Azeroualy, Gunter Saake, Mohammad Abuosba	28
A Hybrid Approach for Dynamic Topic Models with Fluctuating Number of Topics  Christin Katharina Kreutz	34
Stream Processing on High-Bandwidth Memory  Constantin Pohl	40
Applicability of Security Measures in a Wireless Sensor Network Use Case Martin Leuckert, Peter R. Mertens, Gunter Saake	46
Blocking music metadata from heterogenous data sources Oliver Pabst, Udo W. Lipeck	52
B-link-trees for DB/OS Co-Design  Jan Mühlig	58

Approaches for the Improvement of the Multilabel Multiclass Classification with a huge Number of Classes  Martha Tatusch	64
Beyond Straightforward Vectorization of Lightweight Data Compression Algorithms for Larger Vector Sizes  Johannes Pietrzyk, Annett Ungethüm, Dirk Habich, Wolfgang Lehner	70
Connecting X! Tandem to a database management system  Atin Janki, Roman Zoun, Kay Schallert, Rohith Ravidran, David Broneske,  Wolfram Fenske, Robert Heyer, Dirk Benndorf, Gunter Saake	76
Static Multi-tier MapReduce Jobs Workflow Scheduling in Hybrid Clouds Hani Al-Sayeh	82
GDWDS: First Insights from a Student-based Key Phrase Annotation Process of Medical Information Needs on a Novel German Diabetes Web Data Set <i>Julia Romberg</i>	88
Piecing together large puzzles, efficiently: Towards scalable loading into graph database systems  Gabriel Campero Durand, Jingy Ma, Marcus Pinnecke, Gunter Saake	94
Stonebraker versus Google: 2-0 scores in Rostock - A comparison of big data analytics environments  Daniel Dietrich, Ole Fenske, Stefan Schomacker, Philipp Schweers,  Andreas Heuer	100
Inverses in Research Data Management: Combining Provenance Management, Schema and Data Evolution Tanja Auge, Andreas Heuer	107