

Table of Contents

I. Information Theory

1	Two New Results for Identification for Sources.....	1
	<i>Christian Heup</i>	
2	L -Identification for Uniformly Distributed Sources and the q -ary Identification Entropy of Second Order	11
	<i>Christian Heup</i>	
3	Optimal Rate Region of Two-Hop Multiple Access Channel via Amplify-and-Forward Scheme.....	44
	<i>Binyue Liu and Ning Cai</i>	
4	Strong Secrecy for Multiple Access Channels	71
	<i>Moritz Wiese and Holger Boche</i>	
5	Capacity Results for Arbitrarily Varying Wiretap Channels	123
	<i>Igor Bjelaković, Holger Boche, and Jochen Sommerfeld</i>	
6	On Oblivious Transfer Capacity	145
	<i>Rudolf Ahlswede and Imre Csiszár</i>	
7	Achieving Net Feedback Gain in the Linear-Deterministic Butterfly Network with a Full-Duplex Relay	167
	<i>Anas Chaaban, Aydin Sezgin, and Daniela Tuninetti</i>	
8	Uniformly Generating Origin Destination Tables	209
	<i>David M. Einstein and Lee K. Jones</i>	
9	Identification via Quantum Channels	217
	<i>Andreas Winter</i>	
10	Classical-Quantum Arbitrarily Varying Wiretap Channel.....	234
	<i>Vladimir Blinovskiy and Minglai Cai</i>	
11	Arbitrarily Varying and Compound Classical-Quantum Channels and a Note on Quantum Zero-Error Capacities	247
	<i>Igor Bjelaković, Holger Boche, Gisbert Janßen, and Janis Nötzel</i>	
12	On the Value of Multiple Read/Write Streams for Data Compression	284
	<i>Travis Gagie</i>	
13	How to Read a Randomly Mixed Up Message	298
	<i>Matthias Löwe</i>	

14	Multiple Objects: Error Exponents in Hypotheses Testing and Identification	313
	<i>Evgeni Haroutunian and Parandzem Hakobyan</i>	

II. Combinatorics

15	Family Complexity and VC-Dimension	346
	<i>Christian Mauduit and András Sárközy</i>	
16	The Restricted Word Shadow Problem	364
	<i>Rudolf Ahlswede and Vladimir Lebedev</i>	
17	Mixed Orthogonal Arrays, k -Dimensional M -Part Sperner Multifamilies, and Full Multitransversals	371
	<i>Harout Aydinian, Éva Czabarka, and László A. Székely</i>	
18	Generic Algorithms for Factoring Strings	402
	<i>David E. Daykin, Jacqueline W. Daykin, Costas S. Iliopoulos, and W.F. Smyth</i>	
19	On Data Recovery in Distributed Databases	419
	<i>Sergei L. Bezrukov, Uwe Leck, and Victor P. Piotrowski</i>	
20	An Unstable Hypergraph Problem with a Unique Optimal Solution	432
	<i>Carlos Hoppen, Yoshiharu Kohayakawa, and Hanno Lefmann</i>	
21	Multiparty Communication Complexity of Vector-Valued and Sum-Type Functions	451
	<i>Ulrich Tamm</i>	
22	Threshold Functions for Distinct Parts: Revisiting Erdős-Lehner	463
	<i>Éva Czabarka, Matteo Marsili, and László A. Székely</i>	
23	On Some Structural Properties of Star and Pancake Graphs	472
	<i>Elena Konstantinova</i>	

III. Search Theory

24	Threshold and Majority Group Testing	488
	<i>Rudolf Ahlswede, Christian Deppe, and Vladimir Lebedev</i>	
25	Superimposed Codes and Threshold Group Testing	509
	<i>Arkadii D'yachkov, Vyacheslav Rykov, Christian Deppe, and Vladimir Lebedev</i>	
26	New Construction of Error-Tolerant Pooling Designs	534
	<i>Rudolf Ahlswede and Harout Aydinian</i>	

27	Density-Based Group Testing	543
	<i>Dániel Gerbner, Balázs Keszegh, Dömötör Pálvölgyi, and Gábor Wiener</i>	
28	Group Testing with Multiple Mutually-Obscuring Positives	557
	<i>Hong-Bin Chen and Hung-Lin Fu</i>	
29	An Efficient Algorithm for Combinatorial Group Testing	569
	<i>Andreas Allemann</i>	
30	Randomized Post-optimization for t-Restrictions	597
	<i>Charles J. Colbourn and Peyman Nayeri</i>	
31	Search for Sparse Active Inputs: A Review	609
	<i>Mikhail Malyutov</i>	
32	Search When the Lie Depends on the Target	648
	<i>Gyula O.H. Katona and Krisztián Tichler</i>	
33	A Heuristic Solution of a Cutting Problem Using Hypergraphs	658
	<i>Christian Deppe and Christian Wischmann</i>	
34	Remarks on History and Presence of Game Tree Search and Research	677
	<i>Ingo Althöfer</i>	
35	Multiplied Complete Fix-Free Codes and Shiftings Regarding the 3/4-Conjecture	694
	<i>Michael Bodewig</i>	
36	Creating Order and Ballot Sequences	711
	<i>Ulrich Tamm</i>	

Obituaries and Personal Memories

37	Abschied	725
	<i>Alexander Ahlswede</i>	
38	Rudi	726
	<i>Beatrix Ahlswede Loghin</i>	
39	Gedenkworte für Rudolf Ahlswede	730
	<i>Konrad Jacobs</i>	
40	In Memoriam Rudolf Ahlswede 1938 - 2010	732
	<i>Imre Csiszár, Ning Cai, Kingo Kobayashi, and Ulrich Tamm</i>	
41	Rudolf Ahlswede 1938-2010	735
	<i>Christian Deppe</i>	

42	Remembering Rudolf Ahlswede	739
	<i>Vladimir Blinovsky</i>	
43	Rudi Ahlswede	741
	<i>Jacqueline W. Daykin</i>	
44	The Happy Connection between Rudi and Japanese Researchers . . .	743
	<i>Kingo Kobayashi and Te Sun Han</i>	
45	From Information Theory to Extremal Combinatorics: My Joint Works with Rudi Ahlswede	746
	<i>Zhen Zhang</i>	
46	Mr. Schimanski and the Pragmatic Dean	749
	<i>Ingo Althöfer</i>	
47	Broken Pipes	751
	<i>Thomas M. Cover</i>	
48	Rudolf Ahlswede's Funny Character	752
	<i>Ilya Dumer</i>	
49	Two Anecdotes of Rudolf Ahlswede	754
	<i>Ulrich Tamm</i>	
	Bibliography of Rudolf Ahlswede's Publications	756
	Author Index	773