

Recent Developments of General Topology and its Applications

**International Conference in Memory
of Felix Hausdorff (1868–1942)**

Berlin, March 22–28, 1992

edited by

Werner Gähler
Horst Herrlich
Gerhard Preuß



Akademie Verlag

Contents

Introduction	11
S. Arhangel'sht	
Divisibility and cleavability	13
A. Bellen	
A couple of questions concerning nowhere constant continuous functions	27
B. L. Bentley	
Strict extensions of T_1 -spaces	33
B. L. Bentley and B. Herrlich	
Compactness = completeness $\cap$ total boundedness — a natural example of a non-reflective intersection of reflective subcategories	46
B. Böger	
How to make a path injective	57
G. C. L. Brümmer	
Completions of functorial topological structures	60
G. Castellini, J. Kąkolinski, and G. E. Strecker	
Categorical closure operators via Galois connections	72
S. Dolecki and R. Perron	
Topological semigroups of every countable sequential order	89
E. Dicks	
Felix Hausdorff — Paul Mongré: Some aspects of his life and the meaning of his death	85
P. Eklund and W. Gähler	
Contributions to fuzzy convergence	118
R. Fric	
On completions of rationals	124
S. Gähler and W. Gähler	
Generalized topologies generated by distance functions	130
W. Gähler	
Monadic topology — a new concept of generalized topology	136
U. Böhm	
On the equivalence between β -algebras and compact Hausdorff spaces in the framework of Łukasiewicz logic	150
S. S. Hong	
Simple extensions of frames	156
M. Hušek	
History and development of Hausdorff's work in extension in metric spaces	160
J. Isbell	
The cardinality and weight-spectrum of a compact space	170
B. Kleisli and H.-P. Kunen	
Topologies on totally convex spaces	176

<i>H.-P. Künzi</i>	Minimal order compactifications and quasi-uniformities	181
<i>D. Leseberg</i>	Superconvergence spaces and related topics	187
<i>H. Lord</i>	Factorizations and disconnectedness	197
<i>R. Louen and K. Reitz</i>	Products of metric spaces	203
<i>E. Louen-Colebunders</i>	Hausdorff separation for Cauchy spaces	212
<i>E. Michael</i>	Selection theorems with and without dimensional restrictions	218
<i>J. Nagata</i>	A survey of dimension theory V	223
<i>R. Nakagawa</i>	Separation axioms for fuzzy topological spaces	236
<i>L. D. Nel</i>	Effective categories of complete separated spaces	242
<i>C. Pedicchio</i>	On Grothendieck quasi-topoi	252
<i>H. Poppe</i>	On Hausdorff convergence of graphs of functions	256
<i>J. Porter</i>	Hausdorff-closed extensions and Tychonoff	261
<i>G. Preuß</i>	Semiform limit spaces and semi-Cauchy spaces	268
<i>H.-Ch. Reichel</i>	Distance functions and g -functions as a unifying concept in the theory of generalized metric spaces	279
<i>G. Richter</i>	Algebraically behaved categories of ordered Hausdorff spaces	287
<i>S. Solberg and S. Romaguera</i>	The Hausdorff extension theorem for distance spaces	293
<i>F. Schwarz</i>	Hulls of classes of "gestufte Räume"	299
<i>V. Trnková</i>	Rigid points and rigidity-creating properties	303
<i>P. Vojtáš</i>	Topological cardinal invariants and the Galois-Tukey category	309
	List of Participants	315
	List of Talks	318