

2014 10th International Conference on the Design of Reliable Communication Networks

(DRCN 2014)

**Ghent, Belgium
1-3 April 2014**



**IEEE Catalog Number: CFP14818-POD
ISBN: 978-1-4799-4008-0**

TABLE OF CONTENTS

Optimised Heuristics For A Geodiverse Routing Protocol	1
<i>Y. Cheng, M. Gardner, J. Li, R. May, D. Medhi, J. Sterbenz</i>	
Using Multi-Topology Routing To Improve Routing During Geographically Correlated Failures	10
<i>M. Gardner, R. May, C. Beard, D. Medhi</i>	
On The Influence Of The Underlying Network Topology On Optical Telecommunication Network Availability Under Shared Risk Link Group Failures	18
<i>V. Miletic, D. Maniadakis, B. Mikac, D. Varoutas</i>	
Network Coding-Based Protection Scheme For Elastic Optical Networks	26
<i>W. Ramirez, X. Masip-Bruin, M. Yannuzzi, D. Montero, A. Martinez, V. Lopez</i>	
Joint Anycast And Unicast Routing And Spectrum Allocation With Dedicated Path Protection In Elastic Optical Networks	34
<i>R. Goscien, K. Walkowiak, M. Klinkowski</i>	
Preventive Start-Time Optimization Against Network Failure	42
<i>E. Oki</i>	
Route Leak Identification: A Step Toward Making Inter-Domain Routing More Reliable	50
<i>M. Siddiqui, D. Montero, M. Yannuzzi, R. Serral-Gracia, X. Masip-Bruin</i>	
Network Design For Tolerating Multiple Link Failures Using Fast Re-Route (FRR)	58
<i>R. Sinha, F. Ergun, K. Oikonomou, K. Ramakrishnan</i>	
Path Layout Planning And Software Based Fast Failure Detection In Survivable OpenFlow Networks	66
<i>S. Lee, K. Li, K. Chan, G. Lai, Y. Chung</i>	
A Novel Approach For Ensuring High End-To-End Availability: The Spine Concept	74
<i>T. Gomes, D. Tipper, A. Alashaikh</i>	
An Enhanced ILP Design Model For Node-Encircling p-Cycle Networks	82
<i>A. Kasem, R. Gallardo, J. Doucette</i>	
Optimal Regenerator Placement In Survivable Translucent Networks	89
<i>Q. Rahman, Y. Aneja, S. Bandyopadhyay, A. Jaekel</i>	
Network Reliability - The Role Of Excellence In Network Operations	96
<i>D. Davies</i>	
Optimal Resource Allocation For Survivable Virtual Infrastructures	101
<i>G. Cavalcanti, R. Obelheiro, G. Koslovski</i>	
On The Design Of Resilient IP Overlays	109
<i>M. Nagy, J. Tapolcai, G. Retvari</i>	
Protecting PONs: A Failure Impact, Availability And Cost Persepective Based On A Geometric Model	117
<i>A. Fernandez, N. Stol</i>	
Impact Of Optical Access Topologies Onto Availability, Power And QoS	125
<i>A. Ladanyi, T. Cinkler, A. Mitsenkov</i>	
Energy & Reliability Optimal MAC For WSNs	133
<i>E. O'Connell, B. O'Flynn, D. Boyle</i>	
Reliable Delivery Route Computation For Threshold Secret Shared Content	141
<i>N. Ogino, H. Yokota</i>	
Does Network Coding Improve The Throughput Of A Survivable Multicast Network?	149
<i>S. Elloumi, E. Gourdin, T. Lefebvre</i>	
Availability Analysis Of Resilient Geometric Routing On Internet Topology	157
<i>S. Sakhaf, W. Tavernier, D. Colle, M. Pickavet, P. Demeester</i>	
Author Index	