

2008 2nd International Symposium on Advanced Networks and Telecommunication Systems

(ANTS)

**Mumbai, India
15 – 17 December 2008**



**IEEE Catalog Number: CFP0869D-PRT
ISBN: 978-1-4244-3600-2**

TABLE OF CONTENTS

Worldwide Energy Needs for ICT: The Rise of Power-Aware Networking	1
<i>M. Pickavet, W. Vereecken, S. Demeyer, P. Audenaert, B. Vermeulen, C. Develder, D. Colle, B. Dhoedt, P. Demeester</i>	
Fault Tolerant Multicast Couple Hop Routing	4
<i>D. Lastine, A. K. Somani</i>	
Demonstration of Enhanced Connectivity in ASON/GMPLS Network	7
<i>W. Hu, Y. Jin, W. Sun, W. Guo, H. He, Y. Dong, S. Xiao</i>	
Resilience Enhancement of Home Gateways using Failure Analysis	10
<i>S. Ramanathan, C. Lac</i>	
Pseudowire VCCV - BFD Vs Ethernet OAM	13
<i>N. R. Indukuri</i>	
Automatic Channel Power Control (ACPC) Loops in ROADM Network	16
<i>A. Malik, S. Choudhary</i>	
Utility Computing for the SMB Industry	19
<i>V. Mohan</i>	
Lawful Interception on Session Border Controller using SIP	22
<i>S. Dhanagopal, L. Venkatesan, D. Nagabhyru</i>	
Broadband Millimeter Wave Networks: Architectures and Applications	25
<i>U. Madhow</i>	
Transparent Optical Network Design with Mixed Line Rates	28
<i>A. Nag, M. Tornatore</i>	
An Overlay Architecture for Fault Diagnosis in Video Delivery Networks	31
<i>M. Venkataraman, M. Chatterjee</i>	
Service Cloaking and Authentication at Data Link Layer	34
<i>S. P. Arun Kumar</i>	
Concurrent Multi-Layer Restoration Scheme for GMPLS based WDM Networks	37
<i>R. Ghimire, S. Mohan, M. Leary, T. Tidwell</i>	
Fast Updated Markov based Split Reservation Protocol in WDM Optical Networks	40
<i>M. Sengupta, S. K. Mondal, C. Bose, D. Saha</i>	
Peer-to-Peer Streaming: Lowering Barrier to Entry in IPTV	43
<i>S. Tewari, S. Menon</i>	
Performance Evaluation of the WiMedia MAC Protocol in High Density Wireless Environments	46
<i>F. Leipold, S. Bovelli, S. Brandner, B. Muller-Rathgeber</i>	
Shared versus Dedicated Buffers for Real-Time Traffic in Optical Routers with Very Small Buffers	49
<i>A. Vishwanath, V. Sivaraman</i>	
Impact of Bounded Jitter on Resource Consumption in Multi-hop Networks	52
<i>L. Wang, P. K. Verma</i>	
Implementation Scheme for End-to-End Quality of Service (QoS) Sessions over Internet	55
<i>R. Joshi, G. P. Saraph</i>	

Proactive Loss Recovery using Forward Segment Redundancy in Optical Burst-Switched (OBS) Networks.....	58
<i>D. Chandran, N. Charbonneau, V. M. Vokkarane</i>	
Fast-Dual-Radio Cross-Layer Handoffs in Multi-Hop Infrastructure-mode 802.11 Wireless Networks for In-Vehicle Multimedia Infotainment	61
<i>J. Poroor, S. Karunagaran, S. Sundararajan, R. Pillai</i>	
An Efficient and Optimized Bluetooth Scheduling Algorithm for Scatternets.....	64
<i>G. R. Reddy, S. Bhatnagar</i>	
Benefits of Inter-Flow Bandwidth Sharing in Broadband Wireless Infrastructure Networks.....	67
<i>S. K. Ahuja, A. Gopalan, S. Ramasubramanian</i>	
Steganography in 802.15.4 Wireless Communication.....	70
<i>A. M. Mehta, S. Lanzisera, K. S. J. Pister</i>	
Greedy Scheduling in Multihop Wireless Networks	73
<i>N. Sahasrabudhe, J. Kuri</i>	
Loner Links Aware Routing and Scheduling in Wireless Mesh Networks	76
<i>P. H. Pathak, D. Gupta, R. Dutta</i>	
Layer Manager Controlled Mobility Management on Wireless Overlay Networks	79
<i>A. K. Mukhopadhyay, D. Saha</i>	
Experimental Investigation of IEEE 802.11e EDCA.....	82
<i>S. Mukherjee, X.-H. Peng</i>	
Wireless Backhaul for LTE - Requirements, Challenges and Options	85
<i>G. K. Venkatesan, K. Kulkarni</i>	
Evaluation of a Buffered Time-Wavelength Cross-connect with Sparse Wavelength Converters.....	88
<i>A. Gadkar</i>	
Resource Provisioning Through Traffic-Aware Code Allocation in a Hybrid PON Employing WDM and OCDMA.....	91
<i>J. Ratnam, S. Chakrabarti, D. Datta</i>	
Mathematical Model and Analysis of Peer-to-Peer IPTV	94
<i>H. Liu, G. Riley, R. Ingle</i>	
A Bandwidth-Efficient Scheme for Distributed Storage Systems.....	97
<i>N. S. Bathaee, M. R. Pakravan</i>	
An Improved Frequency Offset Estimation Algorithm by Multi-Band Averaging Method for MB-OFDM based UWB Communication for WPAN Applications.....	100
<i>D. Sen, S. Chakrabarti, R. V. Raja Kumar</i>	
Evaluation of the Hybrid Bootstrap Mechanism for Multicast Routing	103
<i>T. Takabatake</i>	
Improving Uploading Performance of TCP in Network Mobility	106
<i>B. Sardar, M. Nasipuri, D. Saha, M. Hassan</i>	
A Dynamic Bandwidth Guaranteed Routing Using Heuristic Search for Clustered Topology.....	109
<i>G. Kandavanam, D. Botvich, S. Balasubramaniam, P. N. Suganthan, M. F. Tasgetiren</i>	
Review of ITU-T K.60 Procedures for Measurement of Unintentional Interference on Broadband over Power Line Systems.....	112
<i>C. P. Colvero, V. R. D. Carneiro, B. F. Cunha, P. V. Gonzalez Castellanos</i>	

Design and Analysis of New Code Families for Three-Dimensional OCDMA	115
<i>M. Ravi Kumar, S. S. Pathak, N. B. Chakrabarti</i>	
Clustering and Prefetching Techniques for Network-based Storage Systems.....	118
<i>D. N. Thakker, G. E. Mapp</i>	
Comparative Cost Study of Broadband Access Technologies.....	121
<i>P. Chowdhury, S. Sarkar, A. A. Reaz</i>	
Multimedia-aware MMSPEED: A Routing Solution for Video Transmission in WMSN.....	124
<i>S. Darabi, N. Yazdani, O. Fatemi</i>	
Adaptive Advance Reservation Based Inter-Domain Framework.....	127
<i>M. Chamania, X. Chen, A. Jukan, F. Rambach, C. Gruber, M. Hoffmann</i>	
An Efficient Data Structure for Storing Network Intrusion Detection Dataset	130
<i>N. Hubballi, S. Biswas, S. Nandi</i>	
Design and Analysis of a Quasi Colourless Multi-wavelength 2-port Edge-ROADM	133
<i>R. Kumar, P. Nair, V. Nagarajan</i>	
Flow-Aware Channel Assignment for Multi-Radio Wireless-Optical Broadband Access Network.....	136
<i>A. Reaz, V. Ramamurthi, S. Sarkar</i>	
Robust Traffic Engineering.....	139
<i>H. Agrawal, A. Jennings, M. Gregory</i>	
Author Index	