

2012 17th European Conference on Networks and Optical Communications

(NOC 2012)

**Vilanova i la Geltru, Spain
20-22 June 2012**



**IEEE Catalog Number: CFP1264N-PRT
ISBN: 978-1-4673-0949-3**

TS1: Access Networks

The Path Computation Element for the Network Service and Business Plane: Computation of Route Offers and Price Modelling for Inter-Carrier Services ***

Gino Carrozzo, Nicola Ciulli, Pasquale Donadio, Antonio Cimmino

Comparison Between Two 60GHz Multipoint RoF Architectures for the Home Area Network ***

Joffray Guillory, Yacine Ait Yahia, Anna Pizzinat, Benoit Charbonnier, Catherine Algani, Marc Rosales, Jean-Luc Polleux

Wavelength-Selection for High Data Rate Free Space Optics (FSO) in Future Next Generation Wireless Communications ****

Thomas Plank, Erich Leitgeb, Zabih Ghassemlooy

An Enhanced Ant Colony Optimization for FTTH Access Network Design **

Andrej Chu, Anis Ouali, Kin Fai Poon

100% FTTx Coverage is Economically Feasible Even in Rural <1 People/km² Areas ****

Hans Eric Sandström, Per Sundin, Mats Erixon

Upstream OCDMA-TDM Passive Optical Network Using a Novel Sourceless ONU ***

Mohammad Gharaei, Catherine Lepers, Philippe Gallion

Managing delay in the access ****

David Larrabeiti, Jose A. Hernandez, Isaac Seoane, Ricardo Romeral

TS2: Optical Network Devices

Demonstrating OpenFlow over a Carrier Ethernet Switch Router (CESR) - A Services Perspective ****

Chinmay Vaishampayan, Sarvesh Bidkar, Saurabh Mehta, Deval Bhamare, Raviraj Vaishampayan, Ashwin Gumaste

Role of Network Virtualization in Future Internet Innovation ****

Dimitra Simeonidou, Reza Nejabati

Converged IT and Optical Network Virtualisation: the Last (Clean-)Step towards the Future Internet Infrastructure Management ****

Jordi Ferrer Riera, Joan A. García-Espín, Sergi Figuerola, Jens Buysse, Marc De Leenheer, Chris Develder, Shuping Pen

Bandwidth Utilization Enhancement for MPPM Using Gradual Multi-Pulse Pulse Position Modulation ****

Hossam Selmy, Hossam Shalaby, Zen Kawasaki

Low Complexity Bit Rate Variable Transponders Based on Optical OFDM with PAPR Reduction Capabilities ***

Laia Nadal, Michela Svaluto Moreolo, Josep M. Fabrega, Gabriel Junyent

160-Gb/s Optical OFDM Demultiplexer Based on Photonic Ring Resonators ***

Ruth Vilar, Francisco Ramos, Javier Marti

Receiver-side Digital Signal Processing for 100-GE Coherent Optical Transmission Systems ***

Fernando Guiomar, Armando Pinto

A Simple and Low Cost Remote-up Conversion Scheme Using Only One Optical Modulator and Its Application in a 60GHz Radio-over-fiber System ***

Zizheng Cao, Chigo Okonkwo, Henrie van den Boom, Bo Yang, Shihuan Zou, Mingda Huang, Eduward Tangdionga, Ton Koonen

TS3: Energy Efficiency in High-Speed Networks (Invited)

EWA: an adaptive algorithm for energy saving in IP-over-WDM networks ****

Filip Idzikowski, Luca Chiaraviglio, Edoardo Bonetto

A note on potential energy savings by extending the average cycle times in Passive Optical Networks ***

José Alberto Hernández, Isaac Seoane, Ricardo Romeral, David Larrabeiti

Exporting Data-Plane Energy-Aware Capabilities from Network Devices toward the Control Plane: The Green Abstraction Layer ****

Diego Reforgiato, Alfio Lombardo, Franco Davoli, Leonardo Fialho, Martin Collier, Pasquale Donadio, Raffaele Bolla, Roberto Bruschi

Bounded Energy Consumption with Dynamic Packet Coalescing ***

Sergio Herrería Alonso, Miguel Rodríguez Pérez, Manuel Fernández Veiga, Cándido López García

TS4: Physical Impairments

Routing protocol enhancements for Power State Engineering of Green Network elements ****

Dominique Verchere, Annalisa Morea, Nicolas Le Sauze

Assessment of the Performance of DPSK Optical Direct-Detection Receivers Impaired by In-Band Crosstalk - Analytical Formulation Validation ***

João Rebola, Luís Gonçalo Cancela, João Pires

Performance Analysis of RF-Pilot Phase Noise Compensation Techniques in Coherent Optical OFDM Systems ****

Saleh Hussin, Kisanapong Puntsri, Reinhold Noé

Electrical Characterization of a 25 Gbit/s VCSEL Module with TO-46 Form Factor Packaging ***

Tien-Tsorng Shih, Pei-Hao Tseng, Jau-Ji Jou, Shun-Shien Chu, Yaw-Dong Wu, Wood-Hi Cheng

Characterization of a Phase Modulated Coherent Optical OFDM System Based on Hartley Transform ****

Marcin Chochol, Josep M. Fabrega, Michela Svaluto Moreolo, Gabriel Junyent

Experimental Characterization of the Photon Statistics of Four-Wave Mixing Photon Source ****

Álvaro Almeida, Nuno Silva, Paulo André, Armando Pinto

Mean Square Error Analysis of Improved Receivers for Unipolar Communications - Asymmetrically Clipped Optical OFDM ****

Eyal Katz, Amir Laufer, Yeheskel BarNess

TS5: Optical Networks I (control, burst & packet networks)

An On-Line Path Computation Algorithm for a Protected GMPLS Enabled Multi-Layer Network ****

Anica Bukva, Ramon Casellas, Ricardo Martinez, Raul Muñoz

Performance Modeling of Asynchronous Bufferless Optical Packet Switches with Limited Range Wavelength Converters ***

Shuna Yang, Norvald Stol, Harald Øverby

Optical Multi-band OFDM Switching Technology ***

Sofiene Blouza, Esther Le Rouzic, Nicolas Brochier, Bernard Cousin

Dynamic Wavelength Allocation Algorithms for On-Demand Deployment of GMPLS-controlled Virtual WSON Using a VON Resource Broker ****

Ricard Vilalta, Raul Muñoz, Ramon Casellas, Ricardo Martinez

Performance Assessment of the Optical Packet Switch Architecture with Highly Distributed Control Under Data Center Traffic ****

Roger Pueyo Centelles, S. Di Lucente, H. J. S Dorren, Nicola Calabretta

Impact of TCP Synchronization on Capacity Dimensioning of Optical Burst Switched (OBS) Links ***

Oscar González, Ignacio de Miguel, R.J. Durán, J.C. Aguado, Noemí Merayo, Patricia Fernández

TS6: Advances in Networking (Invited)

Empirical study based on Machine Learning Approach to Assess the QoS/QoE correlation ***

Sajid Mushtaq, Abdelhamid Mellouk, Brice Augustin, Emna Rekik

Total Cost Comparison of Next Generation Optical Access Networks with Node Consolidation ****

Carmen Mas Machuca, Kun Wang, Mario Kind, Koen Casier

Robustness Analysis of Real Network Topologies under Multiple Failure Scenarios ****

M.Manzano, Josep Lluís Marzo, Eusebi Calle, Anna Manolova

Using an Analytical Power Model to Survey Power Saving Approaches in Backbone Networks ***

Ward Van Heddeghem, Michael C.Parker, Sofie Lambert, Willem Vereecken, Bart Lannoo, Didier Colle, Mario Pickavet, Piet Demeester

Scalability Analysis of WSS-based ROADMs ****

Gianluigi Notarnicola, Giuseppe Rizzelli, Guido Maier, Achille Pattavina

TS7: Optical Networks II (Routing & Protection)

FRA: A New Fuzzy-based Routing Approach for Optical Transport Networks *

Ehsan Ahvar, Eva Marín-Tordera, Marcelo Yannuzzi, Xavier Masip-Bruin, Shohreh Ahvar

Design of Virtual Optical Bus Networks: A Heuristic Approach ****

Ahmad Rostami, Sandeep Kumar Singh

Impairment-Aware Routing in Translucent Spectrum-Sliced Elastic Optical Path Networks ****

Song Yang, Fernando A. Kuipers

Improved Algorithm for Low Cost Lightpath Assignment in Mixed Line Rates WDM Networks ****

Dusan Skovajsa, Alejandra Beghelli

Rapid Protection Schemes in an All-Optical Packet Metro Ring ****

Lida Sadeghioon, Annie Gravey, Philippe Gravey

Building an MPLS-TP Simulator ****

Vishal Negi, Umang Kumar, Tulika Pandey, Ashwin A Gumaste

TS8: Network Performance

How Well Are we handling Electronic-Waste? **

David W. Faulkner, Climate Associates Ltd

On the Effectiveness of Optical Parallel Transmission in IP Offloading ***

Xiaomin Chen, Mohit Chamanian, Admela Jukan

Design, Deployment and Experimental Assessment of All-Optical Wavelength Conversion in the GMPLS-controlled ADRENALINE Testbed ****

Francisco Javier Vílchez, Raul Muñoz, Ramon Casellas, Ricardo Martinez, Ricard Vilalta

On Relay Selection for Cooperative Free-Space Optical Communication ****

Yasin Çelik, Niyazi Odabasioglu

GPON and EP2P: A Techno-Economic Study ***

Sergio Ricciardi, Germán Santos-Boada, Davide Careglio, Jordi Domingo-Pascual

Multilayer Restoration in Hierarchical IP/MPLS Over WSON Networks ****

Fernando Muñoz, Victor Lopez, Oscar González de Dios, Juan P. Fernández-Palacios