

# Shuangyi Yan

## PERSONAL INFORMATION

Present Appointment: Lecturer in High Performance Networks Group (HPN)  
Address: HPN Group, Merchant Venturers Building, Woodland Road, Bristol,  
Clifton, BS8 1UB, United Kingdom  
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## WORK EXPERIENCE

### **May 2017 – Present: Lecturer**

HPN, Department of Electrical & Electronic Engineering, University of Bristol, UK

### **Sep 2016 – April 2017: Research Fellow**

HPN, Department of Electrical & Electronic Engineering, University of Bristol, UK

### **May 2013 – Aug 2016: Senior Research Associate**

HPN, Department of Electrical & Electronic Engineering, University of Bristol, UK

### **Jan 2011 – May 2013: Postdoctoral Fellow**

Department of Electronic and Information of Engineering, Hong Kong Polytechnic University, Hong Kong

### **Jul 2009 – Dec 2012: Assistant Researcher**

Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, China.

## EDUCATION

**Sep 2004 - Jun 2009:** PhD in Optical Engineering at Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, China.

Title of the thesis: "Research and Realization on Key Technologies for Ultra-high-speed Optical Communication Networks".

**Sep 2000 - Jun 2004:** BSc in Information Engineering (optics & electronics) at Tianjin University, China.

## ACADEMIC AWARDS

2011 Member of "Organization of Promoted Innovation of CAS" (Chinese Academy of Science, China).  
2009 "Zhuliyuehua" Scholar.

## RESEARCH

My research experience covers spectrally efficient optical transmission technologies, short-range optical interconnections, optical signal processing, ultra-short optical pulse generation, elastic optical networks, multi-dimensional optical networks, and data center networks. Recently my research focuses on enabling technologies for future optical network supported 5G applications (Artificial intelligence, Front/Back Haul, DCN, Metro, Core and network convergence), Multi-layer network analytics with real-time performance monitoring, novelty network architecture for large-scale low-latency data center networks. My research leads to **58 referred papers (including 5 post deadline papers, 21 first-authored paper) and 6 patents (4 first-authored)**. I have been involved more than 12 projects, funded either by governments or industries. Currently, I'm leading the sub-group on optical data plane research with 3 researchers, 2 visiting researchers and 1 Ph.D. student in HPN.

### Project Experience

- (1) Metro-haul: Metro High bandwidth, 5G Application-aware optical network, with edge storage, compute and low latency, EU H2020 5G-PPP, No:761727
- (2) TOUCAN: Towards Ultimate Convergence of All Networks, EPSRC, No: EP/L020009/1, 2014.8 - 2020.8.
- (3) INSIGHT: Introducing Insight into the Abstraction of Optical Network Infrastructures, EPSRC, no: EP/L026155/2, 2016.6-2018.3.  
Role: Person in charge of Bristol
- (4) Scalable and efficient orchestration of Ethernet services using software-defined and flexible optical networks, "STRUASS-EU", FP7 ICT, no: 608528, 2013. 6-2016. 5.  
Role: Person in charge of Bristol (Work package leader)
- (5) Industry-driven elastic and adaptive lambda infrastructure for service and transport networks, "IDEALIST", FP7 ICT, no: 317999, 2012.11-2015.10.  
Role: Research contributor
- (6) Towards ultimate convergence of all networks, "TOUCAN", EPSRC, no: EP/L020009/1, 2014.8-2019.8.  
Role: Research contributor
- (7) Integrating advanced optical hardware and SDN for future all optical DCNs, "COSIGN", FP7-ICT, no: 619572, 2014.1-2016.12.  
Role: Research contributor
- (8) Key technologies for 400G spectrally-efficient optical transmission system (2010.10~2012.4, Funded by Huawei.  
Role: Person in charge
- (9) Research of high sensitivity TDM-PON system (2011.4-2011.12, Funded by Huawei.  
Role: Research contributor
- (10) Assess possible solutions for short distance transmission systems for data center (2012.6-2012.11, Funded by Huawei.  
Role: Research contributor
- (11) Key technologies for Tbit/s transmission (2012.6-2013.5, Funded by Huawei  
Role: Research contributor
- (12) Generation of pulse width variable optical dark pulse, Xi'an institute of optics and precision mechanics.2011-2012.  
Role: Principle Investigator

- (13) Basic Problems and key technologies research about ultra-high speed all-optical packet switching photonics networks. Chinese Academy of Science Knowledge Innovation, National Basic Scientific Research, KGCX2-YW-108, 2007.1-2010.12.

Role: Research contributor

### **Invited Talks**

#### **2019**

- (1) Invited talk in OFC 2019, San Diego, USA
- (2) Invited talk ONDM 2019, Athens, Greek

#### **2018**

- (3) ECOC 2018, Invited talk, Rome, Italy
- (4) Invited talk in ICTON 2018, Guangzhou, China
- (5) Invited talk: Network optimization with machine-learning, ONDM 2018, Dublin, Ireland

#### **2017**

- (6) ACP 2017, Guangzhou, China
- (7) Beijing University of Post and Technology, 2017, Beijing, China

### **Professional Services**

#### **Membership in Panels and Committees**

IEEE membership and OSA membership

#### **2019**

- Co-Chair of ACP 2019 topic: Machine-learning
- Globecom 2019 ONS TPC member
- EuCNC 2019 TPC member
- OECC|PS 2019 TPC member
- ONDM 2019 TPC member
- Optics Frontier – CIOP 2019 TPC member

#### **2018**

- EuCNC 2018 TPC member
- CLEO-PR|OECC|PGC TPC member
- IEEE Global Optical Information and Network Conference 2018: Co-chair of Topic 2: Information processing and data analytics

### **Reviewer Activities**

- (1) Journal of optical communications and networking
- (2) Journal of Lightwave Technology
- (3) Applied optics
- (4) Optics Letters

- (5) Photonics (MDPI)
- (6) Chinese optics letters
- (7) Book Chapter review of Optical WDM Networks, Cambridge University Press

## **Publications**

### **Academic Journal Papers (Total: 28, first-authored: 11):**

#### **2019:**

- [1]. F. Meng et al., “Self-Learning Monitoring On-Demand Strategy for Optical Networks,” *J. Opt. Commun. Netw., JOCN*, vol. 11, no. 2, pp. A144–A154, Feb. 2019.

#### **2018:**

- [2]. Yi Shu, **Shuangyi Yan\***, Chris Jackson, Koteswararao Koudepu, Emilio H. Salas, Yan Yan, Reza Nejabati, and Dimitra Simeonidou, “Programmable OPS/OCS hybrid data centre network,” *Optical Fiber Technology*, Vol. 44, pp. 102-114, Feb. 2018.
- [3]. K. Kondepu, C. Jackson, Y. Ou, A. Beldachi, A. Pagès, F. Agraz, F. Moscatelli, W. Miao, V. Kamchevska, N. Calabretta, G. Landi, S. Spadaro, **S. Yan**, D. Simeonidou, and R. Nejabati, “Fully SDN-Enabled All-Optical Architecture for Data Center Virtualization with Time and Space Multiplexing,” *J. Opt. Commun. Netw.*, vol. 10, no. 7, pp. B90–B101, Jul. 2018.

#### **2017:**

- [4]. **Shuangyi Yan**, Alejandro Aguado, Yanni Ou, Rui Wang, Reza Nejabati, and Dimitra Simeonidou, “Multi-Layer Network Analytics with SDN-based Monitoring Framework [Invited],” *Journal of Optical Communications and Networking*, vol. 9, no. 2, Feb. 2017.
- [5]. Fàbrega, J. M., Moreolo, M. S., Mayoral, A., Vilalta, R., Casellas, R., Muñoz, R., Yoshida, Y., Kitayama, K., Kai, Y., Nishihara, M., Okabe, R., Tanaka, T., Takahara, T., Rasmussen, J. C., Yoshikane, N., Cao, X., Tsuritani, T., Morita, I., Habel, K., Freund, R., López, V., Aguado, A., **S. Yan**, D. Simeonidou, Szyrkowiec, T., Autenrieth, A., Shiraiwa, M., Awaji, Y. & Wada, N. “Demonstration of Adaptive SDN Orchestration: A Real-time Congestion-aware Services Provisioning over OFDM-based 400G OPS and Flexi-WDM OCS,” *Journal of Lightwave Technology*, Feb. 2017.
- [6]. A. Mayoral, R. Vilalta, R. Muñoz, R. Casellas, R. Martínez, M. Svaluto Moreolo, J. M. Fàbrega, A. Aguado, **S. Yan**, D. Simeonidou, J. M. Gran Josa, V. Lopez, P. Kaczmarek, R. Szwedowski, T. Szyrkowiec, A. Autenrieth, N. Yoshikane, X. Cao, T. Tsuritani, I. Morita, M. Shiraiwa, N. Wada, M. Nishihara, T. Tanaka, T. Takahara, J. C. Rasmussen, Y. Yoshida, and K.-I. Kitayama., “Control Orchestration Protocol: unified transport API for distributed cloud and network orchestration,” *Journal of Optical Communications and Networking*, vol. 9, no. 2, Feb. 2017.

#### **2016:**

- [7]. **S. Yan**, E. Hugues-Salas, Y. Ou, R. Nejabati, and D. Simeonidou. “Hardware-Programmable Optical Networks (Invited),” *SCIENCE CHINA Information Sciences*, vol. 59, no. 10, Oct. 2016.
- [8]. Y. Ou, **S. Yan**, A. Hammad, B. Guo, S. Peng, R. Nejabati, and D. Simeonidou, “Demonstration of Virtualizeable and Software-Defined Optical Transceiver,” *Journal of Lightwave Technology*, vol. 34, no. 8, pp. 1916–1924, Apr. 2016.
- [9]. Y. Yan, G. M. Saridis, Y. Shu, B. R. Rofoee, **S. Yan**, M. Arslan, T. Bradley, N. V. Wheeler, N. H. L. Wong, F. Poletti, M. N. Petrovich, D. J. Richardson, S. Poole, G. Zervas, and D. Simeonidou, “All-Optical Programmable Disaggregated Data Centre Network Realized by FPGA-Based Switch and Interface Card,” *Journal of Lightwave Technology*, vol. 34, no. 8, pp. 1925–1932, Apr. 2016.
- [10]. M. S. Moreolo, J. M. Fabrega, L. Nadal, F. J. Vílchez, A. Mayoral, R. Vilalta, R. Muñoz, R. Casellas, R. Martínez, M. Nishihara, T. Tanaka, T. Takahara, J. C. Rasmussen, C. Kottke, M. Schlosser, R. Freund, F. Meng, **S. Yan**,

G. Zervas, D. Simeonidou, Y. Yoshida, and K. I. Kitayama, "SDN-Enabled Sliceable BVT Based on Multicarrier Technology for Multiflow Rate/Distance and Grid Adaptation," *Journal of Lightwave Technology*, vol. 34, no. 6, pp. 1516–1522, Mar. 2016.

- [11]. O. G. de Dios, R. Casellas, F. Paolucci, A. Napoli, L. Gifre, A. Dupas, E. Hugues-Salas, R. Morro, S. Belotti, G. Meloni, T. Rahman, V. López, R. Martínez, F. Fresi, M. Bohn, **S. Yan**, L. Velasco, P. Layec, and J. P. Fernandez-Palacios, "Experimental Demonstration of Multivendor and Multidomain EON With Data and Control Interoperability Over a Pan-European Test Bed," *Journal of Lightwave Technology*, vol. 34, no. 7, pp. 1610–1617, Apr. 2016.

#### **2015:**

- [12]. **S. Yan**, E. Hugues-Salas, V. J. F. Rancano, Y. Shu, G. M. Saridis, B. Rahimzadeh Rofoee, Y. Yan, A. Peters, S. Jain, T. May-Smith, P. Petropoulos, D. J. Richardson, G. Zervas, and D. Simeonidou, "Archon: A Function Programmable Optical Interconnect Architecture for Transparent Intra and Inter Data Center SDM/TDM/WDM Networking," *Journal of Lightwave Technology*, vol. 33, no. 8, pp. 1586–1595, Apr. 2015.
- [13]. **S. Yan**, Y. Yan, B. Rahimzadeh Rofoee, Y. Shu, E. Hugues-Salas, G. Zervas, and D. Simeonidou, "Real-Time Ethernet to Software-Defined Sliceable Superchannel Transponder," *Journal of Lightwave Technology*, vol. 33, no. 8, pp. 1571–1577, Apr. 2015.
- [14]. V. J. F. Rancano, S. Jain, T. C. May-Smith, E. Hugues-Salas, **S. Yan**, G. Zervas, D. Simeonidou, P. Petropoulos, and D. J. Richardson, "Demonstration of Space-to-Wavelength Conversion in SDM Networks," *IEEE Photonics Technology Letters*, vol. 27, no. 8, pp. 828–831, Apr. 2015.

#### **2014:**

- [15]. Y. Yoshida, A. Maruta, K. Kitayama, M. Nishihara, T. Takahara, T. Tanaka, J. Rasmussen, N. Yoshikane, T. Tsuritani, I. Morita, **S. Yan**, Y. Shu, Y. Yan, R. Nejabati, G. Zervas, D. Simeonidou, R. Vilalta, R. Munoz, R. Casellas, R. Martinez, V. Lopez, A. Aguado, and J. Beltran, "SDN-based Network Orchestration of Variable-capacity Optical Packet Switching Network over Programmable Flexi-grid Elastic Optical Path Network," *Journal of Lightwave Technology*, vol. 33, no. 3, pp. 609–617, Aug. 2014.
- [16]. N. Amaya, **S. Yan**, M. Channegowda, B. R. Rofoee, Y. Shu, M. Rashidi, Y. Ou, et al. "Software Defined Networking (SDN) over Space Division Multiplexing (SDM) Optical Networks: Features, Benefits and Experimental Demonstration," *Optics Express* 22, no. 3, 3638–3647, Feb. 2014.

#### **Before:**

- [17]. **S. Yan**, X. Weng, Y. Gao, C. Lu, A. P. T. Lau, Y. Ji, L. Liu, and X. Xu, "Generation of square or hexagonal 16-QAM signals using a dual-drive IQ modulator driven by binary signals," *Opt. Express*, vol. 20, no. 27, pp. 29023–29034, Dec. 2012.
- [18]. Y. Gao, A. P. T. Lau, **S. Yan**, and C. Lu, "Low-complexity and phase noise tolerant carrier phase estimation for dual-polarization 16-QAM systems," *Opt. Express* 19(22), pp. 21717–21729, 2011.
- [19]. D. Luo, **S. Yan**, X. Xie, and W. Zhao, "Generation of 10-GHz duty-cycle tunable square optical pulse in an SOA-based mode-locked fiber laser," *Laser Physics*, vol. 21, no. 11, pp. 1909–1913, 2011.
- [20]. H. Feng, W. Zhao, **S. Yan**, and X. Xie, "Error-free OTDM demultiplexer using the supercontinuum spectrum-slicing induced clock signal," *Optics Communications*, vol. 284, pp. 4327–4330, 2011.
- [21]. H. Feng, W. Zhao, **S. Yan**, and X. P. Xie, "Generation of 10-GHz ultra-short pulses with low time jitter in an actively mode-locked fiber laser," *Laser Physics*, vol. 21, no. 2, pp. 404–409, 2011.
- [22]. **S. Yan**, X. Xie, Z. Hui, H. Feng and W. Zhao, "Generation of 10 GHz, 1.9 ps optical pulse train using semiconductor optical amplifier and Silica-based highly nonlinear fiber," *Journal of Optics*, Vol. 12, p. 085401, 2010.

- [23]. **S. Yan**, W. Zhao, X. Xie, and H. Lu, "Simple approach to picosecond pulse generation based on semiconductor optical amplifier," *Electronics Letters*, vol. 46, pp. 703-704, May. 2010
- [24]. **S. Yan**, J. Zhang, and W. Zhao, "SOA-based actively mode-locked fiber ring laser by forward injecting an external pulse train," *Optics Communications*, vol. 283, pp. 87-92, Jan. 2010.
- [25]. **S. Yan**, J. Zhang, and W. Zhao, "SOA-based polarity-preserving all-optical wavelength conversion at 80Gbit/s: Wide conversion range, well dynamic characteristics and polarization insensitive," *Microwave and Optical Technology Letters*, vol. 50, pp. 2392-2399, 2008
- [26]. **S. Yan**, J. Zhang, and W. Zhao, H. Lu, W. Wang, "Broadly tunable SOA-Based active mode-locked fibre ring laser by forward injection optical pulse," *Chinese Physics Letters*, Vol.25, No.8 , pp.2876-2879, 2008
- [27]. **S. Yan**, J. Zhang, and W. Zhao, "40-GHz wavelength tunable mode-locked SOA-based fiber laser with 40-nm tuning range," *Chinese Optics Letters*, Vol.6, No.9, pp.676-678, 2008.
- [28]. Y. Xie, J. Zhang, W. Wang, **S. Yan**, and X. Xie, "All-Optical RZ to NRZ Format Conversion Using Single SOA Assisted by Optical Band-Pass Filter," *Chinese Physics Letters*, vol. 25, pp. 2051-2054, 2008.

### Conference Contributions (Total: 45, first-authored: 14)

#### 2019

- [1]. Shuangyi Yan, etc., "Dynamic Abstraction of Optical Networks with Machine Learning Technologies," ONDM 2019, Athens, Greece. (Invited Talk)
- [2]. Shuangyi Yan, etc., "Field Trial of Machine-Learning-Assisted and SDN-Based Optical Network Management," OFC 2019, San Diego, CA, USA. (Invited Talk)
- [3]. Frank, H., Stange Tessinari, R., Gao, Z., Colman Meixner, C., Yan, S., Nejabati, R. & Simeonidou, D., "*Resource Analysis and Cost Modeling for End-to-End 5G Mobile Networks*". 2019 ONDM, Athens, Greece.
- [4]. D. J. Ives *et al.*, "A Comparison of Impairment Abstractions by Multiple Users of an Installed Fiber Infrastructure," in *2019 Optical Fiber Communications Conference and Exhibition (OFC)*, 2019, pp. 1–3, San Diego, USA.
- [5]. Z. Gao, J. Zhang, S. Yan, Y. Xiao, D. Simeonidou, and Y. Ji, "Deep Reinforcement Learning for BBU Placement and Routing in C-RAN," in *2019 Optical Fiber Communications Conference and Exhibition (OFC)*, 2019, pp. 1–3, San Diego, USA.

#### 2018

- [6]. **Shuangyi Yan**, Reza Nejabati, and Dimitra Simeonidou," Data-driven network analytics and network optimisation in SDN-based programmable optical networks," ONDM 2018, Dublin, Ireland, 2018, pp. 234-238 (Invited Talk)
- [7]. F. Meng, A. Mavromatis, Y. Bi, **S. Yan**, R. Wang, Y. Ou, K. Nikolovgenis, R. Nejabati, and D. Simeoniou, "Field Trial of Monitoring On-Demand at Intermediate-Nodes Through Bayesian Optimization," in *Optical Fiber Communication Conference (2018)*, San Diego, CA, 2018, paper. M3A.2.
- [8]. F. Meng, **S. Yan**, K. Nikolovgenis, Y. Bi, Y. Ou, R. Wang, R. Nejabati, and D. Simeonidou, "Field Trial of Gaussian Process Learning of Function-Agnostic Channel Performance Under Uncertainty," in *OFC 2018*, San Diego, 2018, paper W4F.5.
- [9]. R. Wang *et al.*, "Coordinated Fibre Span Power Optimisation and ROADM Input Power Management Strategy for Optical Networks," in *2018 European Conference on Optical Communication (ECOC)*, 2018, pp. 1–3.
- [10]. Y. Ou *et al.*, "Field-Trial of Machine Learning-Assisted Quantum Key Distribution (QKD) Networking with SDN," in *2018 European Conference on Optical Communication (ECOC)*, 2018, pp. 1–3.

**2017:**

- [11]. Shuangyi Yan, N. Khan Khan, Alex Mavromatis, et al., “Field trial of Machine-Learning-assisted and SDN-based Optical Network Planning with Network-Scale Monitoring Database,” in ECOC 2017, Gothenburg, 2017, paper. TH.PDP.B4. (Postdeadline paper)
- [12]. **Shuangyi Yan**, Arash Farhadi Beldachi, Fengchen Qian, Koteswararao Kondepu, Yan Yan, Chris Jackson, Reza Nejabati, and Dimitra Simeonidou, “Demonstration of Real-Time Modulation-Adaptable Transmitter,” in ECOC 2017, Gothenburg, 2017, paper. TH.1.A.
- [13]. **Shuangyi Yan**, Chao Lu, Alan Pak Tau Lau, Reza Nejabati, and Dimitra Simeonidou, “Simple Intradyne Receiver with Time-switched Phase Diversity for Optical Interconnects,” presented at the ACP, Guangzhou, China, 2017, paper. M2B.4.
- [14]. **Shuangyi Yan**, “Simple Intradyne Receiver with Time-switched Phase Diversity for Optical Interconnects,” presented at the ACP, Guangzhou, China, 2017. (Invited Talk)
- [15]. Zhu, X. Wang, **S. Yan**, et al., “3.36-Tbit/s OAM and Wavelength Multiplexed Transmission over an Inverse-Parabolic Graded Index Fiber,” in Conference on Lasers and Electro-Optics (2017), San Jose, CA, 2017, paper. SW4I.3.
- [16]. Y. Li, **S. Yan**, N. Hua, Y. Ou, F. Qian, R. Nejabati, D. Simeonidou, X. Zheng, “Hardware Programmable SDM/WDM ROADMs,” OFC 2017, Los Angeles, 2017, Paper Th2A.21.
- [17]. A. Hammad, A. Aguado, K. Kondepu, Y. Zong, J. Marhuenda, **S. Yan**, R. Nejabati, and D. Simeonidou, “Demonstration of NFV content delivery using SDN-enabled virtual infrastructures,” in 2017 Optical Fiber Communications Conference and Exhibition (OFC), Los Angeles, CA, 2017, paper. Tu3L.11.
- [18]. Y. Ou, F. Meng, **S. Yan**, A. Aguado, M. Pascual, P. Anadarajah, R. Nejabati, D. Simeonidou, “Investigation of Optical Impacts on Virtualization using SDN-enabled Transceiver and Optical Monitoring,” OFC 2017, Los Angeles, 2017, Paper Th1J.5.
- [19]. F. Meng, Y. Ou, **S. Yan**, K. Sideris, M. Pascual, R. Nejabati, D. Simeonidou, “Field Trial of a Novel SDN Enabled Network Restoration Utilizing In-Depth Optical Performance Monitoring Assisted Re-Planning,” accepted in OFC 2017, Los Angeles, 2017.

**2016:**

- [20]. **S. Yan**, E. Hugues-Salas, A. Hammad, Y. Yan, G. Saridis, S. Bidkar, R. Nejabati, D. Simeonidou, A. Dupas, P. Layec, “Demonstration of Bandwidth Maximization between Flexi/Fixed Grid Optical Networks with Real-Time BVTs,” presented at the European Conf. Optical Communication, Düsseldorf, 2016 paper Th.1.E.2.
- [21]. **S. Yan**, A. Aguado, Y. Ou, R. Nejabati, and D. Simeonidou, “Demonstration of an SDN Based Monitoring Framework for Converged Packet and Optical Networks Analytic,” presented at the Optical Fiber Communication Conf., Anaheim, 2016, paper W3F.4.
- [22]. Y. Yoshida, K.-I. Kitayama, Y. Kai, M. Nishihara, R. Okabe, T. Tanaka, T. Takahara, J. C. Rasmussen, N. Yoshikane, X. Cao, T. Tsuritani, I. Morita, A. Mayoral López de Lerma, J. Fabrega, R. Vilalta, R. Casellas, R. Martínez, M. S. Moreolo, R. Muñoz, K. Habel, R. Freund, V. Lopez, A. Aguado, **S. Yan**, D. Simeonidou, T. Szyrkowicz, A. Autenrieth, M. Shiraiwa, Y. Awaji, and N. Wada, “First Demonstration of Cognitive SDN Orchestration: A Real-time Congestion-aware Services Provisioning over OFDM-based 400G OPS and Flexi-WDM OCS Networks,” presented at the Optical Fiber Communication Conf., Anaheim, 2016, paper Th5B.2. **(OFC POST DEADLINE paper)**
- [23]. Y. Ou, A. Aguado, F. Meng, **S. Yan**, B. Guo, R. Nejabati, and D. Simeonidou, “Optical Network Virtualization using Multi-Technology Monitoring and Optical Virtualize-able Transceiver,” presented at the Optical Fiber Communication Conf., Anaheim, 2016, paper W3F.7.
- [24]. A. Mayoral López de Lerma, R. Vilalta, R. Muñoz, R. Casellas, R. Martínez, M. Svaluto Moreolo, J. M. Fàbrega, **S. Yan**, A. Aguado, E. Hugues Salas, S. Peng, G. S. Zervas, R. Nejabati, D. Simeonidou, J. M. Gran Josa, V.

Lopez, O. Gonzalez de dios, J. P. Fernández-Palacios, P. Kaczmarek, R. Szwedowski, T. Szyrkowicz, A. Autenrieth, N. Yoshikane, X. Cao, T. Tsuritani, I. Morita, M. Shiraiwa, N. Wada, M. Nishihara, T. Tanaka, T. Takahara, J. C. Rasmussen, Y. Yoshida, and K.-I. Kitayama, “First experimental demonstration of distributed cloud and heterogeneous network orchestration with a common Transport API for E2E services with QoS,” presented at the Optical Fiber Communication Conf., Anaheim, 2016, paper Th1A.2.

#### 2015:

- [25]. **S. Yan**, S. Peng, Y. Yan, B. R. Rofoee, Y. Shu, E. Hugues-Salas, G. Zervas, D. Simeonidou, M. S. Moreolo, J. M. Fàbrega, L. Nadal, Y. Yoshida, P. J. Argibay-Losada, K. Kitayama, M. Nishihara, R. Okabe, T. Tanaka, T. Takahara, J. C. Rasmussen, C. Kottke, M. Schlosser, F. J. Arribas, and V. López, “100G beyond Ethernet transport for inter- and intra-DCN communication with solutions and optical enabling technologies in the ICT STRAUSS project,” presented in 2015 European Conference on Networks and Communications (EuCNC), pp. 350–354, 2015.
- [26]. G. Saridis, E. Hugues-Salas, Y. Yan, **S. Yan**, S. Poole, G. Zervas, and D. Simeonidou, “DORIOS: Demonstration of an All-Optical Distributed CPU, Memory, Storage Intra DCN Interconnect,” presented at the Optical Fiber Communication Conf., Los Angeles, 2015, paper W1D.2.
- [27]. O. G. de Dios, R. Casellas, F. Paolucci, A. Napoli, L. Gifre, S. Annoni, S. Belotti, U. Feiste, D. Rafique, M. Bohn, S. Bigo, A. Dupas, E. Dutisseuil, F. Fresi, B. Guo, E. Hugues, P. Layec, V. López, G. Meloni, S. Misto, R. Morro, T. Rahman, G. Khanna, R. Martínez, R. Vilalta, F. Cugini, L. Potì, A. D’Errico, R. Muñoz, Y. Shu, **S. Yan**, Y. Yan, G. Zervas, R. Nejabati, D. Simeonidou, L. Velasco, and J. Fernández-Palacios, “First demonstration of multi-vendor and multi-domain EON with S-BVT and control interoperability over Pan-European testbed,” presented at the European Conf. Optical Communication, Valencia, 2015. (**ECOC Post deadline paper**)
- [28]. Y. Shu, S. Peng, Y. Yan, **S. Yan**, E. Hugues-salas, G. Zervas, and D. Simeonidou, “Evaluation of function-topology programmable (FTP) optical packet/circuit switched data centre interconnects,” presented at the European Conf. Optical Communication, Valencia, 2015.
- [29]. Y. Ou, **S. Yan**, B. Guo, S. Peng, G. Zervas, R. Nejabati, and D. Simeonidou, “Demonstration of optical virtualizable transceiver using extended OpenFlow control,” presented at the European Conf. Optical Communication, Valencia, 2015.
- [30]. M. S. Moreolo, J. M. Fabrega, L. Nadal, F. J. Vílchez, A. Mayoral, R. Vilalta, R. Muñoz, R. Casellas, R. Martínez, M. Nishihara, T. Tanaka, T. Takahara, J. C. Rasmussen, C. Kottke, M. Schlosser, R. Freund, F. Meng, **S. Yan**, G. Zervas, D. Simeonidou, Y. Yoshida, and K. Kitayama, “SDN-enabled sliceable BVT based on multicarrier technology for multi-flow rate/distance and grid adaptation,” presented at the European Conf. Optical Communication, Valencia, 2015.
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#### 2014:

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Signature

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