Speaker Profiles and Presentation Abstracts

01 - Gerard Pera Gonzalvez – PRYSMIAN

09:15 - 09:55   *Selecting the Right Fibre Optic Cable*
(Come scegliere il cavo in fibra ottica ottimale)

Abstract   There are many different aspects on fibre selection. From the specific application to the cable and single fibre there are thousands of solutions available in the market, but they need to be understood properly to get the best fibre performance during operation. The focus of the presentation is on the different fibres, understanding main characteristics and applications, with a short introduction on basic concepts like fibre and cable, showing the relation between the cable performance, based on its design and materials, and the fibre performance in operation.

Speaker Profile   I am the Global Product Manager for the Fibre Optic Cables for Multi-Media Solutions in Prysmian Group based in Cologne, Germany. I have experience on materials research and development, cable design and application in Fibre Optic Cable Solutions and Connectivity. I have an MS/BS degree in Chemical Engineering from Universitat Autònoma de Barcelona.

02 – Gautier Humber – LEGRAND

09:55 - 10:35   *Applications on Fiber: how to guarantee new architectures and the strict loss budgets.*
*(*Applicazioni su fibra: come garantire le nuove architetture e i rigorosi limiti di attenuazione*)*

Abstract   An insight into architectures, technologies, performances, constraints and critical factors for the implementation and deployment of current and near future fiber optic applications in the premises and campuses.

Speaker Profile   Gautier Humbert, RCDD is the standards coordinator for Legrand Digital Infrastructures. This involves copper and fiber cabling, enclosures, PoE, and datacenter design. He is member of working groups in multiple French, European, International and BICSI standards such as: ISO/IEC JTC1/SC25, IEC TC48, IEC TC46, CLC/TC 215, CLC/TC 46X, CLC/TC86BXA. He is also BICSI Europe, Middle East and Africa (EMEA) Regional Director. In 2012 Mr. Humbert received the BICSI European Member of the Year Award.

03 – Clemens Wurster – ROSENBERGER

11:05 - 11:45	*Space Division Multiplexing (SDM) Transmission System Using Optical Multicore Fibers* (Sistemi di trasmissione SDM - Space Division Multiplexing su Fibra Ottica Multicore)

Abstract Optical data transmission via multi-core fibers is a well-suited method to achieve a higher packing density via SDM (Space-Division Multiplexing). A multi-core fiber with 7 multimode cores was used over which a 100GBASE-SR4 Ethernet transmission according to IEEE 802.3bm with 25 GBaud/channel was realized. It could be shown that such an optical transmission system can meet the requirements for a 100GBASE-SR4 transmission. In a follow-up project the coupling of the active components to single-mode multicore fibers is being investigated. 4- and 7-multi-core fibers are used here. The coupling to the active components shall be realized with Photonic wire bonds.

Speaker Profile R&D engineer at Rosenberger OSI GmH & Co KG in Augsburg Germany with focus on R&D in the field of fiber optic connectors and Member of German DKE Standards Committee UK 412.7, mirror committee of IEC SC 86B since 2003. Formerly Head of Design Fiber-Optic/IMS Connector Systems in Löffingen, Germany he previously served as Product Manager at OSI Kommunikations- und Systemtechnik GmbH Co. KG in Gersthofen, Germany, with focus on data centers and PostDoc at the University of Stuttgart, Germany research on fiber optic sensors in the field of medical technology. Clemens has studied physics and holds a PhD. for Research in the field of solid-state acoustics at the University of Stuttgart, Germany.

04 – Charlène Roux, Karine Barthes and Daniele Venuti – VIAVI

11:45 - 12:25	*Successful fiber deployment with automated Bi-Directional testing* (Implementare con successo la fibra con il test bidirezionale automatico)

Abstract Speakers will present the benefits of testing a fiber with bi-directional OTDR test, highlighting what the standard says and the possible solutions with single or two instruments. The presentation will be divided in two different parts: first we'll talk about the Tier 1 and Tier 2 fiber tests, for better understanding the false positive/negative results that this kind of test brings; the second part will be focused on the bi-directional OTDR test in all possible scenarios: manual bi-directional tests, loopback bi-directional test, automatic bi-directional test.

Speaker 1 Charlène Roux – Solutions Marketing Manager: Charlène has over 15 years of expertise in fiber optics. She has held multiple positions in VIAVI ranging from product manager (responsible for a large global fiber portfolio) to recently leading go-to-market and strategic activities for the Hyperscale and Data Center market. She focuses on driving real value to customers, digging deep in researching new technologies and leveraging them to solve specific customer problems and create new opportunities to grow and scale businesses.

Speaker 2   Karine Barthes – Product Line Manager: Karine has over 25 years of expertise in the industry both in product management and in product design development. She started her career in the fiber optic connectors industry and then had various experiences in the electrical industry. She has joined Viavi Solutions in their OTDR competence center in France as a global product manager in September 2022. Her main focus is to provide the worldwide telecommunications and data centers testers with the best OTDR solutions.

Speaker 3   Daniele Venuti – Solutions Engineer: Daniele has over 15 years of experience in the telecommunication field, he joined VIAVI 2 years ago as Solutions Engineer, delivering high-level technical support and solutions for VIAVI's Fiber, Access, Metro, and Wireless-RF portfolio across Italy and South Europe. He presents products and technology presentations at local roadshows, technical seminars, and webinars. His main focus is Fiber Optics and RF tests/solutions.

Live Demo - Parallel Sessions

12:25 - 13:10   **1. Charlène Roux, Karine Barthes and Daniele Venuti – VIAVI**
Multifiber Switch – High Fiber Count Testing

12:25 - 13:10   **2. Gianluca Benenati – FLUKE Networks**
Versiv Platform: lo strumento che semplifica ogni tuo test di misura

05 – Alf Sutherland – AEM

14:10 - 14:50   *Assuring Infrastructure Readiness Across Smart Building Technologies*
(Garantire che le infrastrutture cablate siano adeguate per supportare le diverse tecnologie negli Edifici Intelligenti)

Abstract   Intelligent buildings no longer represent a distant vision of future technological advancement. The ability to converge multiple building applications on a single communications platform exists today, and is being realized in some modern structures. For many others, the opportunity exists to design and deploy the infrastructure systems that are the foundation for building intelligence, particularly including the cabling and networking systems for the central nervous system of an intelligent building. This presentation focuses on detailed tactics used to ensure the physical network infrastructure is capable of supporting Intelligent Buildings communications requirements. This includes the physical cabling, with a look at the various tests defined in ANSI/TIA 1152.A, testing of SPE links, Power Delivery, the importance of SNR based testing to ensure required link speed, and reporting.

Speaker Profile   Alf has over 20 years' technical experience working as a network engineer in LAN networking, Wi-Fi, IT security and network management IT sectors. He provides valuable insights in practical ways to plan, install, maintain and troubleshooting IT networks, both in Data Centers and offices. For the last 11 years, Alf has specialized in LAN and Wi-Fi network testing solutions, but now works for AEM-Test & Measurement as their European Technical Sales Manager, whose solutions provide testing and certification of structured cabling (copper and fiber).

06 – Nigel Hedges – FLUKE Networks

14:50 - 15:30   *When to use an OTDR, and how to use it correctly*
(*Quando e come utilizzare correttamente un OTDR*)

Abstract   Optical Time Domain Reflectometers (OTDR) have for many years been a 'go-to' troubleshooting product for fiber optic engineers whose applications include fault location, performance verification or certification, optical loss issues, low power transmission and connection queries. This presentation explores some of the alternative testing options available, the data delivered by each, and the correct use of OTDR technology, taking account of some of the potential pitfalls of misuse. As always, sufficient awareness of the capabilities and limitations of OTDR test equipment, together with appropriate training, enables the operator to make sensible decisions about the measurements being undertaken.

Speaker Profile   With Fluke Networks for more than 20 years, in sales & support roles, with copper and fiber certification, qualification and verification tools, and with connectivity testing products, now Technical and Applications Specialist for the FN portfolio, supporting EU and MEAT markets in development of testing solutions for twisted pair, coax and fiber applications. A volunteer director of the UK Fiber Optic Industry Association, Nigel also is an accredited CNIDP with a special interest in appropriate knowledge transfer and training.

07 – Wajih Daab – LUNA

16:00 - 16:40   *Optical Backscatter Reflectometers (OBRs) with Sub-Millimeter Resolution for Latency/Length Measurements, and Short Fiber Optic Network Diagnosis*
(Riflettometri ottici a retrodiffusione (OBR) con risoluzione submillimetrica per misure di latenza/lunghezza e diagnosi di reti in fibra ottica su brevi distanze)

Abstract   The ability to identify loss events along optical paths, as well as measure and verify the latency or length of a fiber optic network or link is an important capability for some critical network and data center applications and other fiber optic systems. OBR systems can measure fiber optic latency with picosecond accuracy and identify loss events with 10 μm to 1mm sampling resolution.

Speaker Profile   Wajih Daab has over 10 years of experience in the sales and marketing of high-technology photonics products. He currently holds the position of Director of Business Development in Luna's lightwave division. Wajih holds two master's degrees, in electrical engineering (fiber optics) and systems architecting engineering, from the University of Southern California (USC), Los Angeles.

08 – Christos Birbilis – BELDEN

16:40 - 17:20   *Digital Electricity™ Remote Power Delivery System*
(Sistema di alimentazione remota Digital Electricity™)

Abstract   This presentation provides an insight on several topics related to power distribution systems, including definitions and descriptions of: Power delivery systems, what is Digital Electricity (5-why's), Digital Electricity applications, Technology capability comparison, Standards, Digital Electricity products used.

Speaker Profile   Christos Birbilis is an experienced professional having worked in the Telco and Enterprise Central Office/Data Centre Industries for over 20 years. His proven track record in Telco and Enterprise markets lead Christos to join Belden in 2015 where he is the Product Line Manager for Belden's Structured Cabling and Datacenter solutions defining strategic direction and successfully delivering growth. He is currently leading the Belden EMEA IBDN portfolio including Copper, Fiber connectivity, Infrastructure and iPLM DCIM/AIM solutions.

09 – Davide Badiali – COMMSCOPE

17:20 - 18:00   *Data Center Network Evolution*
(Evoluzione delle Reti nei Data Center)

Abstract   Understanding the current and future state of high-speed networks in data centers is a key aspect of ensuring proper functioning of applications. Topologies, equipment and physical infrastructure will be discussed to support a migration to 400G and beyond. The topics discussed will help network designers and engineers refine migration strategies to meet current and future needs, supporting higher speeds, higher densities and new connector interfaces.

Speaker Profile Davide Badiali currently works for CommScope with the role of Infrastructure System Engineer for Italy, Greece and Cyprus; joined the company in 2001 in the Avaya Connectivity Solutions group before the acquisition done by CommScope in 2004. BICSI member and RCDD since 2006, in 2007 he obtained the CCNA certification from Cisco. Active participation in different groups (CT306, CT46, CT48, SC86A, SC86B) of CEI, Italian standardization committee, since 2017. He studied at Politecnico di Milano where he obtained a degree in Telecommunication Engineering.