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## Recent progress on high-speed optical transmission

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n this talk, we will summarize recent progress on high spectral efficiency (SE) and high-baud-rate signal transmission based on digital coherent optical communications and digital signal processing (DSP). DSP simplifies the reception of advanced modulation formats and also enables the major electrical and optical impairments to be processed and compensated in the digital domain, at the transmitter or receiver side. Based on these advanced technologies, 400Gb/s per channel becomes commercial and will be deployed in the real optical network very soon, and single carrier 1Tb/s per channel has been demonstrated in the lab. These advanced technologies can be employed to extend the transmission distance up to 10,000km. We will also summarize recent progress on high-speed optical signal transmission for short-reach such as data interconnection based on these technologies.

## **Biography**

Jianjun Yu has completed his PhD from Beijing University of Posts and Telecommunications in 1999. He is the Professor of Fudan University and the Director of ZTE TX Inc. He has published more than 500 papers in reputed journals and has been serving as an editorial board member of IEEE Photon. J. IEEE/OSA J. of Lightwave Technol., OSA/IEEE JOCN, and OSA JON. He holds over 62 USA issued patents. He is an OSA Fellow.

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