Best Paper Award in Industry Innovation

First Place

ACP2026-0701-127

First Real-time 128Tb/s and 256Tb/s Unrepeatered Field Trial using 400Gbps and 800Gbps OTN transponders over Field-deployed 137.76-km Ultra-low-loss Multi-core Fiber Link

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First real-time unrepeatered 137.76-km field trial over field-deployed ultra-low-loss large-effective-aera 4-core fiber cable using 400Gbps and 800Gbps backbone OTN transponders is demonstrated, which achieves bit rates of 128Tb/s and 256Tb/s respectively.

Runner-Up

ACP2026-0701-35

Real-time 24λ×1.6 Tb/s Transmission over 960km G.652.D Fiber on Super C Band Using 230 Gbaud 64-QAM-PCS Signals

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We demonstrate a real-time 1.6-Tb/s 230-GBaud dual-subcarrier WDM system over 960-km G.652.D fiber using EDFAs. All 24 channels achieve error-free operation with 1.2-dB OSNR margin (σ=0.28), marking the first demonstration to simultaneously achieve 1.6 Tb/s and 900 km.

Third Place

ACP2026-0715-190

14.6-Tb/s GMI with 400G-per-channel Direct-Detection Optical Interconnects over 25-km AR-HCF

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We leverage the ultralow nonlinearity of anti-resonant hollow-core fiber to unlock launch power bottleneck for XPM-free massively-parallel DWDM transmission, enabling 400G-per-channel Kramers-Kronig direct detection with 17.4-Tb/s line rate and 14.6-Tb/s GMI-estimated capacity over 25 km.