IEEE 802.3
Higher Speed Study Group

Fiber Track Update

John D'Ambrosia
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Thanks

- Chris Cole

Listing of Presentations

Paul Kolesar	CommScope	Advanced MMF Standardization	kolesar_01_1107.pdf
Robert Lingle	OFS	10G transmission over OM3 MMF with relaxed TOSA specifications	sun_01_1107.pdf
Karim Tatah	Cray	100 Gb/s Active Optics Cables	tatah_01_1107.pdf
Pete Anslow	Nortel	Single Mode Fibre Skew Variation and Link Models	anslow_02_1107.pdf
Mike Shahine	Ciena	100GbE Components for SMF Reaches	shahine_01_1107.pdf
Hideki Isono	Fujitsu	Feasibility Study for 25Gb/s10km Transmission Using DML	isono_01_1107.pdf
Matt Traverso	Opnext	SMF 1310nm PMD Link	traverso_01_1107.pdf
Marcus Duelk	Alcatel-Lucent	Analysis of 4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier	gutierrez_01_1107.pdf
Marcus Duelk	Alcatel-Lucent	Using SOAs as Booster and/or Preamplifier for 4x25Gb/s 40-km 1310-nm PMD	gutierrez_02_1107.pdf
Marcus Duelk	Alcatel-Lucent	4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier: Impact of Channel Spacing	gutierrez_03_1107.pdf
Kengo Matsumoto	Sumitomo Electric Industries, LTD.	WDM Alternatives for 100GE 40km SMF application	matsumoto_01_1107.pdf
Ted Woodward	Telecordia	A Use Case for Short Haul Metro WDM Related to 40 km PHY Definition	woodward_01_1107.pdf
Marcus Duelk	Alcatel-Lucent	4x25-Gb/s 40-km 1310-nm PMD with SOA Pre-Amplifier: Variation of SOA Gain	gutierrez_04_1107.pdf

100GE MMF Technologies

- Properties of advanced MMF introduced
  - Opportunity for reaches greater then 100m
- Active optical cables proposed
  - Connectors and need for crosstalk data
- Additional models of MMF OM3 links and optics components were presented

100GE SMF technologies

- Updated tools for modeling 25G WDM links were presented and approved for placement in the tools area
- Variety of technical and program approaches were presented for developing SMF Transceivers
- Feasibility of using DMLs (instead of more expensive EMLs) was demonstrated
- A case was made for reducing the 10km reach objective to 3km to achieve lower cost Transceivers, and to enable potentially the lowest cost approach: un-cooled CWDM DML
- Extensive analysis of SOA performance and design parameters was shown to enable 40km links
- Feasibility of 40km SOA based Transceivers was demonstrated
- Proposal to expand design consideration of 40km Transceivers to include support of multi-band Nx100GE applications.
  - Potential new objective not well received.

Thank You!