# Channel Model Ad Hoc:
## Agenda and General Information

Channel Model Ad Hoc Teleconference

2005 May 4

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If you are present on today’s call, please send me an e-mail indicating your attendance.

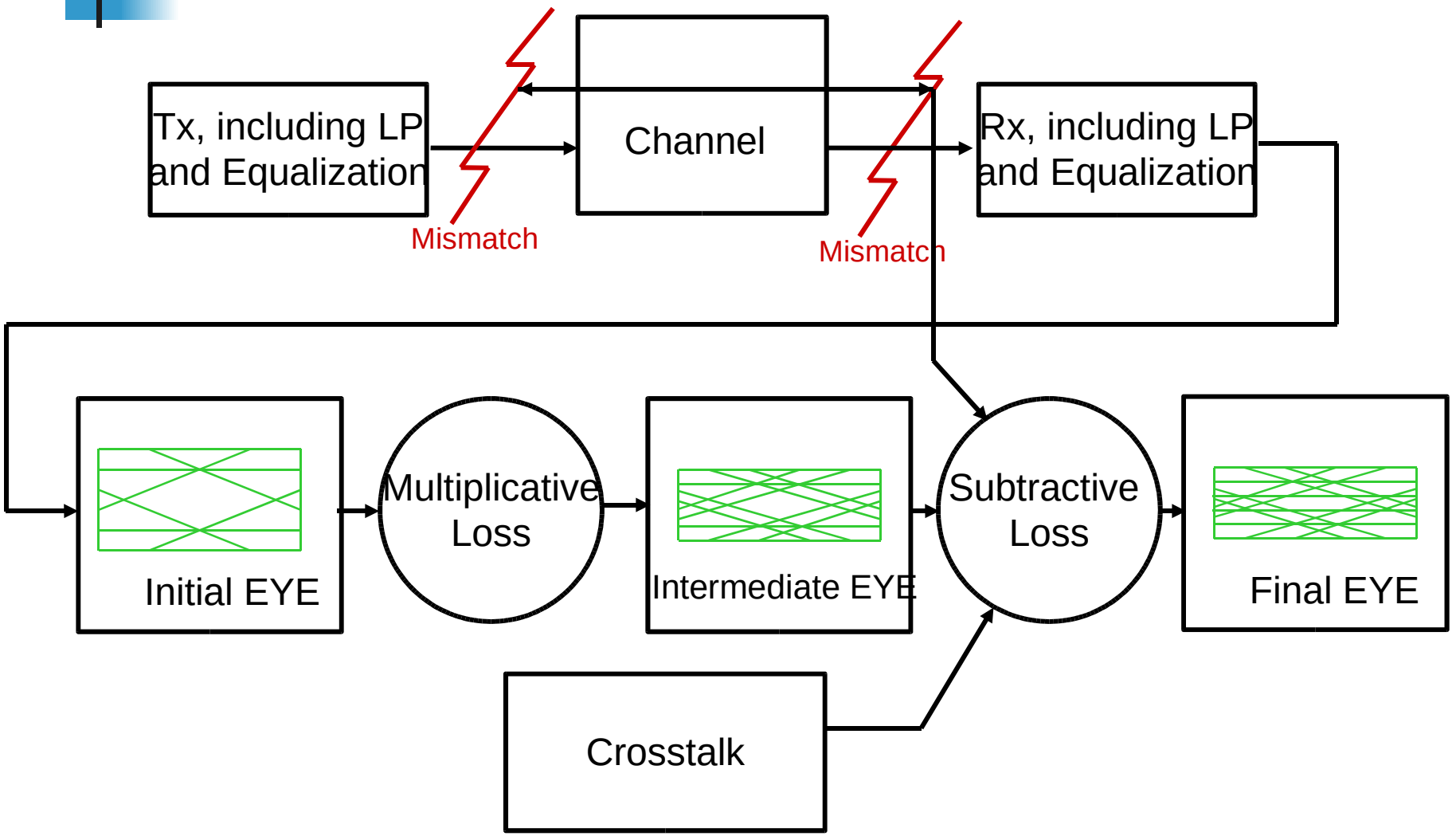
# Schedule of Events

- Teleconference: Wednesday, May 4 (10am PST)
- Teleconference: Wednesday, May 11 (10am PST)
- Wednesday, May 11 (midnight EST)
  - Deadline for requests for presentation time.
- Monday May 16 – Wednesday May 18
  - IEEE P802.3ap Task Force Meeting
  - Austin TX

# Meeting Agenda

- Carry-over items
- New business
  - **Link Budget model**
  - **Healey:  Cross talk**
  - **Sawyer:  Duty cycle distortion**
- Walk-in items
- Straw polls

# Link Budget model



# Link Budget Continued

Possible items in link Budget:

Multiplicative: (gain-attenuation)

| | | |
|---|---|---|
| 1. | Tx return loss: | fixed or channel SDD11 dependent |
| 2. | Rx return loss: | fixed or channel SDD22 dependent |
| 3. | Channel loss: | Computed from channel #1 |
| 4. | Tx equalization penalty: | relative to Popescu non ideal DFE model #2 |
| 5. | Rx equalization penalty: | (see Popescu_1_0205) |
| 6. | Hybrid EYE loss: | alternative to 1-5 by hybrid computation |
| 7. | Tx jitter other than DCD: | fixed |
| 8. | Jitter multiplication: | One treatment of DCD |
| 9. | Rx jitter: | fixed |

# Link Budget Continued

Possible items in link Budget:

Additive: (direct deduction from EYE height)

| | | |
|---|---|---|
| 1. | Cross talk: | Channel cross talk dependent |
| 2. | Un-equalizable ISI: | may be covered by Hybrid model |
| 3. | Re-reflection: | may be covered by Hybrid model |
| 4. | DCD penalty | fixed, alternate treatment of DCD |
| 5. | Receiver margin: | fixed, consists of: |
| | a. Noise | |
| | b. Fixed offset | |
| | c. Minimum Slice input | |

# Link Budget: notes

#1. Channel gain might be computed by the method quoted by Popescu, Cunningham for ideal DFE

#2. Some of our equalization is done by (linear) Tx equalization. This will give smaller signal than available to ideal DFE. This effect could be done by treating the Tx equalization as part of the channel.

The fixed items are needed to complete the budget but only the channel dependent items allow us to specify the channel