

Channel Ad Hoc Meeting Notes

March 2, 2005

Notes recorded by Shannon Sawyer

Moore, "Computing the effect of crosstalk using convolution".

http://ieee802.org/3/ap/public/channel_adhoc/moore_c1_0305.pdf

- Bill Peters – Crosstalk has most impact at the center of the eye? Charles – yes
- Bill – When crosstalk spans multiple eyes at different points how do you handle it? Charles – 8 phase sample points, 8 PDFs
- Bill – Are both the initial impact, then post cursor crosstalk included in analysis? Charles – Interfering data at worst case pattern occurs every 2^{-100} probability. PDF provides probability of each pattern. Many patterns create similar trouble, so convolution sums all of these. If mathematics was infinitely accurate, the black curve on slide 15 would eventually intersect with green spike, which would show all the crosstalk samples were accounted for.
- John – Prefers to have more than one aggressor. Charles – Would like to correlate with more aggressors, if time permits.
- Brian Seeman – Are you familiar with the way StatEye convolves PDFs? Charles – no. Brian – Very similar approach.
- Brian B. – on slide 15, is the magenta line RSS? Charles – it is one value
- Petre – could do presentation in Atlanta
- Adam – Request follow-up presentations at the Atlanta meeting.

Brunn, "Proposal for S-parameter extraction to DC"

http://ieee802.org/3/ap/public/channel_adhoc/brunn_c1_0305.pdf

- Adam – did you do any IFFT to get the impulse response. Brian – no.
- Charles – How about forcing the imaginary part to zero and use the real part? Brian - would rather look at the IFFT first.
- Mike A. – Non zero phase for DC, wrecks impulse response. You need to carry the imaginary component with you to get correct response in time domain. At DC non zero phase seems counter intuitive. Is there precision loss be leaving off the imaginary component.
- Brian – phase wrapping is biggest known issue, other issues are possible but not yet seen by me.
- Xiao-Ming – How about trying another interpolation method. Brian V. – If linear interpolation method matches 99% of the data, there's no need to try other methods.
- John D. – Brian, have you looked at the measured data down to 330kHz? Brian – not yet.
- Adam – Propose to use this method as the basis for future work. Identify any problems and bring to the March meeting. These conversion to time domain could go into an annex....like frequency step, span, frequency to time conversion, etc.

Healey, "Agenda and Genera; Information", Slide 7

http://ieee802.org/3/ap/public/channel_adhoc/agenda_c1_0305.pdf

- Option 1 - define GammaTX and GammaRX explicitly (VTF or cascade)
- Option 2 - add line item for link budget to account for TX/RX mismatch (TX load + channel load + RX load = link)
- Adam – TP1 is defined at the package edge, so by cascading 4-port we are double counting the package.

Attendance:

First	Last	Mar. 2
Michael	Altmann	
Brian	Brunn	
Luke	Chang	
Chi-te	Chen	
John	D'Ambrosia	
Adam	Healey	
Matt	Hendrick	
Mike	Lerer	
Cathy	Liu	
David	McCallum	
Charles	Moore	
William	Peters	
Petre	Popescu	
Shannon	Sawyer	X
Brian	Seemann	
Dima	Smolyansky	
Brian	von Herzen	

X = Meeting notes volunteer.