



QuarkNet

SMU QuarkNet Center

**A progress
report**



Fred Olness

SMU



Darren Carollo

Lincoln HS



QuarkNet

SMU QuarkNet: Year 1

**Pre-Summer Prep:
Periodic meetings**

Summer 2000:

1 week at Fermilab

2 weeks at CERN

5 Weeks at SMU





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SMU QuarkNet: Year 1

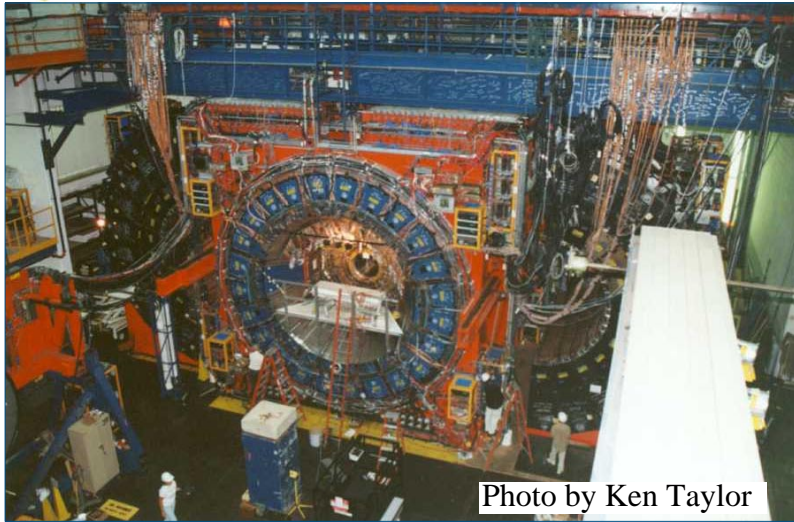


Photo by Ken Taylor

CDF Detector at Fermilab

1 Week at
Fermilab

2 Weeks at CERN

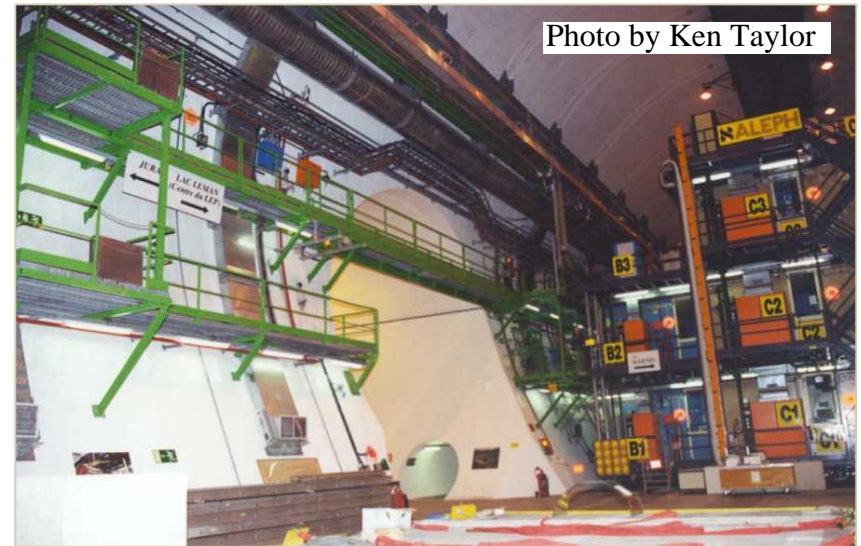


Photo by Ken Taylor

ALEPH Experimental Hall at CERN



Bit Error Rate Tester (BERT) at SMU

5 Weeks at SMU



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Bit Error Rate Tester (BERT)

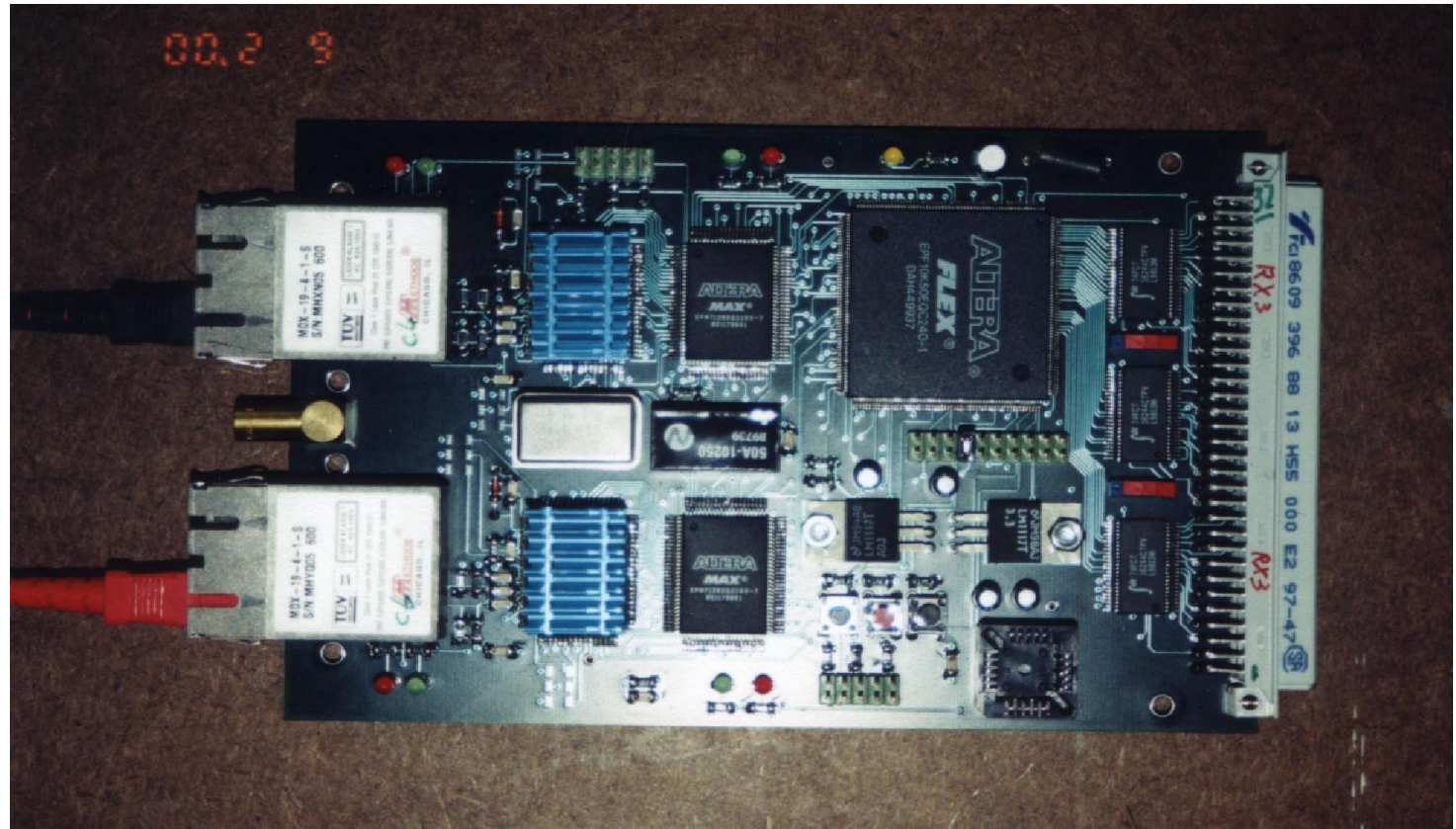
32 bits x 40 Mhz = 1.28 Gbps



Determine test
data to monitor

Outline w/ Excel

Prototype with
LabView





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Bit Error Rate Tester (BERT)

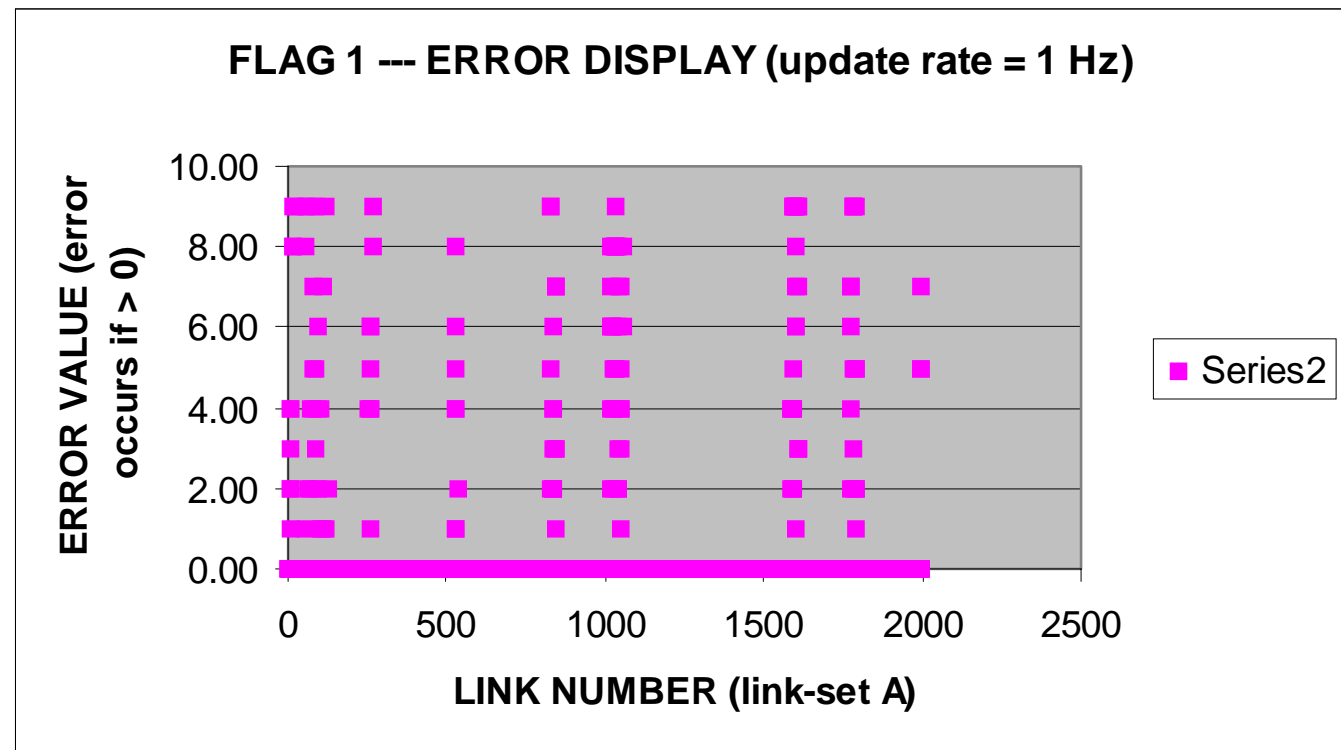
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Determine test data to monitor

Outline w/ Excel

Prototype with LabView

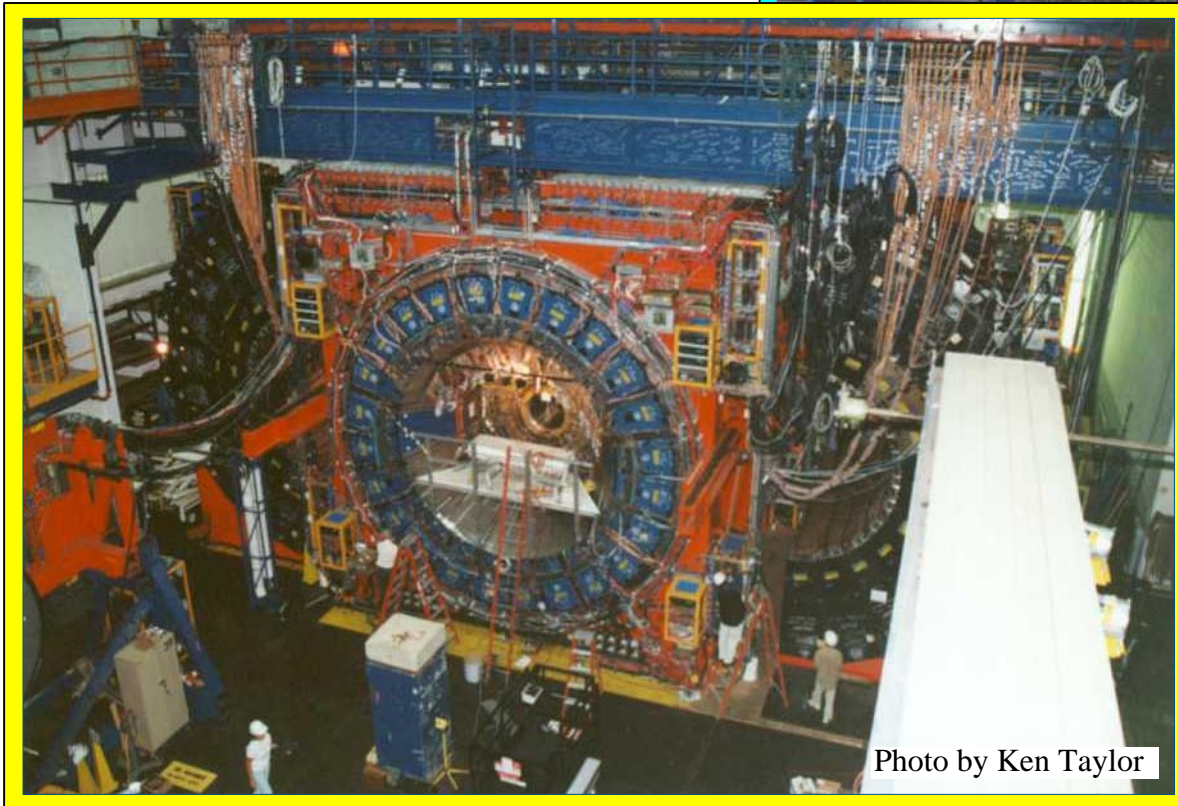




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**Ken
Taylor**

Lake Highlands HS



**CERN
Microcosom
Museum**

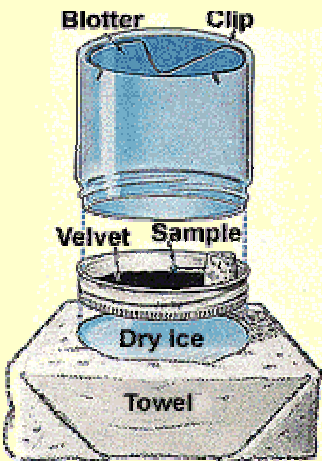
CDF at Fermilab



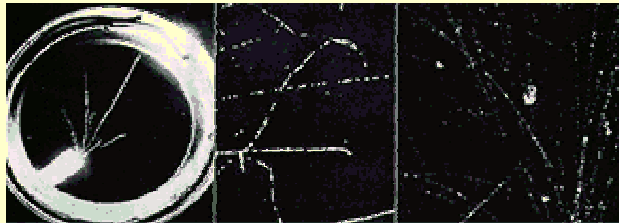
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**Larry
Grise**

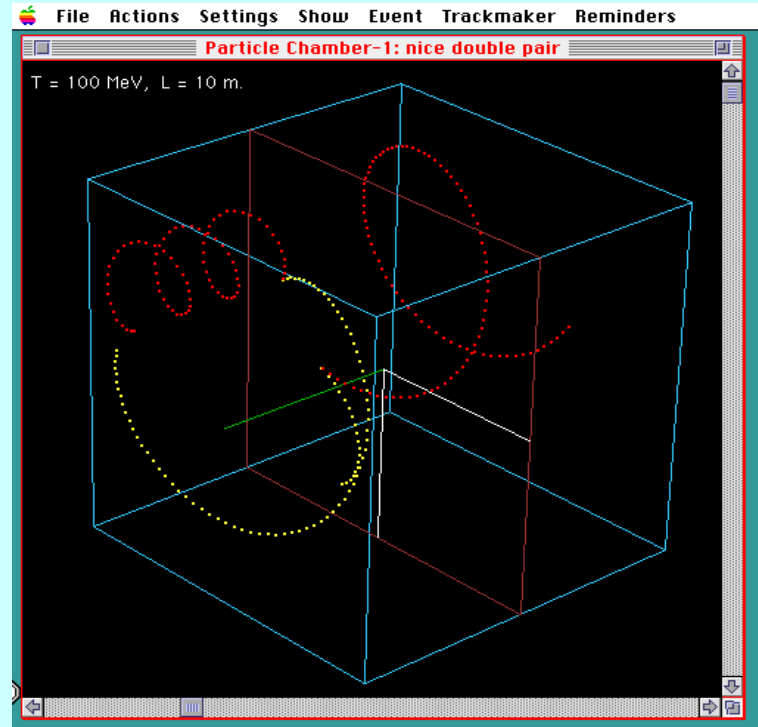
Metropolitan
Christain HS



Cloud Chamber



**On Screen
Particle Physics**





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**Darren
Carollo**

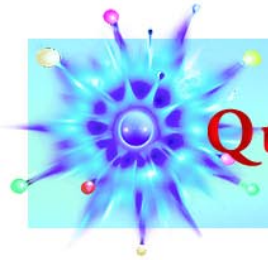
Lincoln HS



SMU LINAC

Fermilab LINAC





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SMU QuarkNet: Year 2

Pre-Workshop Prep:
Periodic meetings

Summer 2001:
2 week workshop at SMU
Follow-up: Lederman, R. Park





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SMU Workshop: Year 2

Students

18 teachers x 200 students/yr = 3600 /yr

Teachers

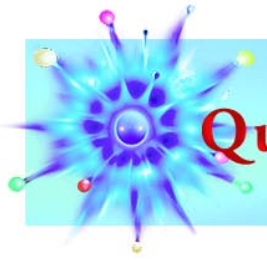


Lead Teachers



Mentors





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QuarkNet Workshop Feedback

Most dynamic workshop I have attended. The energy and love of physics will be transferred to my students as well as the activities and to some extent the in-depth notes. The wide variety of resources in people, books, technology, and Internet will enable me to have an expanding amount of information to share with my students

Very informative - mostly because this is Physics today!! We teach and study a lot about classical topics, but learning about what is going on in current physics is quite new (for me, at least). I can't wait to tell students about this - even if its not part of the curriculum. This has definitely encouraged me to read more on the topic and get my students involved.

The LINAC ws a great idea, and keeping it open allowed lots of modifications and ideas to come out. I'll definitely do the LINAC, in one form or another.

I lived in Chicago for five years I had no idea the type of research that went on at Fermilab. It is very impressive.

The elements that I will transfer to my students will be the examples, drawing, stories, and all the interesting side things that I can make my students interested in particle physics.

www.physics.smu.edu/~olness/quarknet/QuarkNetEvaluations.html



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You cannot teach a many anything; you can only help him to find it within himself. *Galileo*

