



Student Research at Los Alamos

October 27, 2007

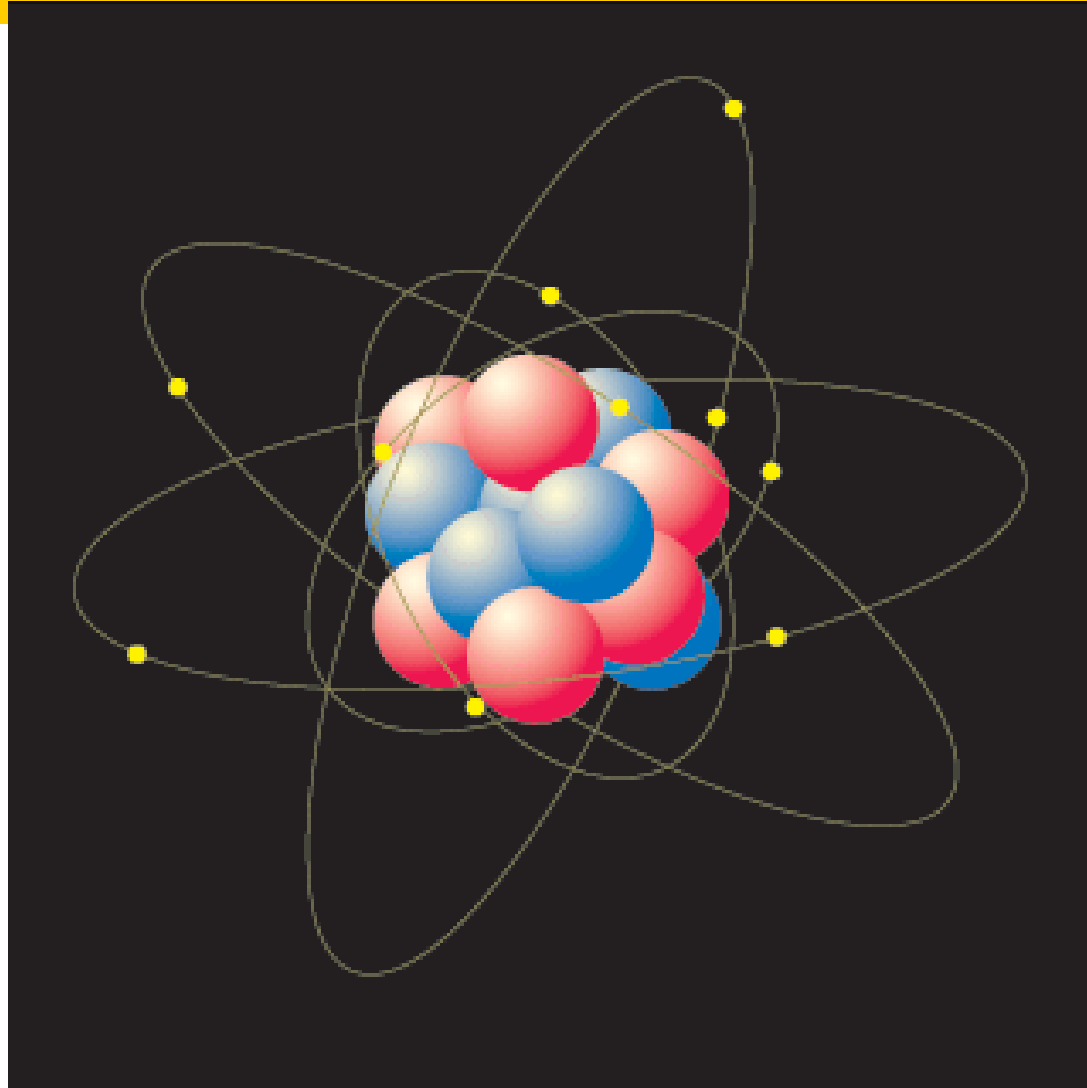
Daniel Haas
Steve Thomson
Dr. Mark Yuly



Outline

- ✦ Neutron-Deuteron Breakup
- ✦ Our Jobs
- ✦ Our Experience
- ✦ Lasting Impressions

Nuclear Physics

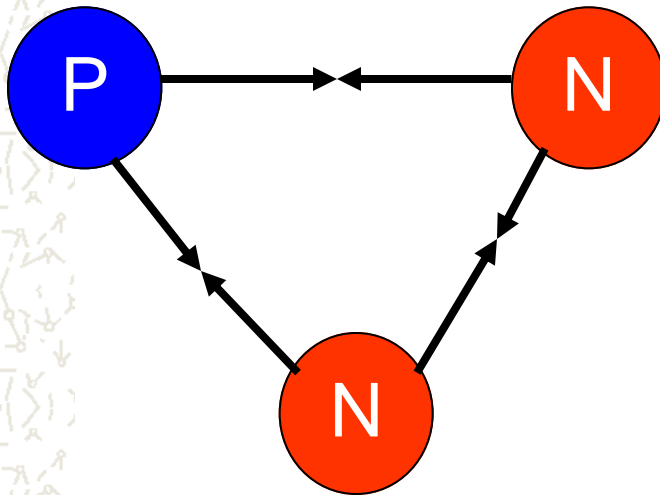


The Four Fundamental Forces

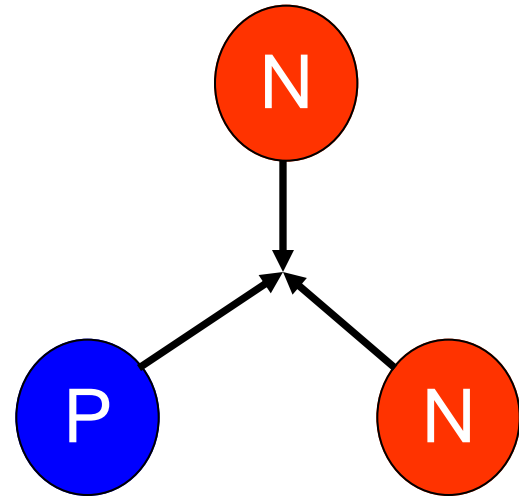
Force	Relative Strength	Range	Example
Strong Nuclear	1	10^{-15} m	Holds nuclei together
Electromagnetic	1/137	Infinite	Holds atoms together
Weak Nuclear	1/10,000	10^{-16} m	Radioactive decay
Gravity	10^{-38}	Infinite	Holds Solar system together

Strong Force

Two-Nucleon Force

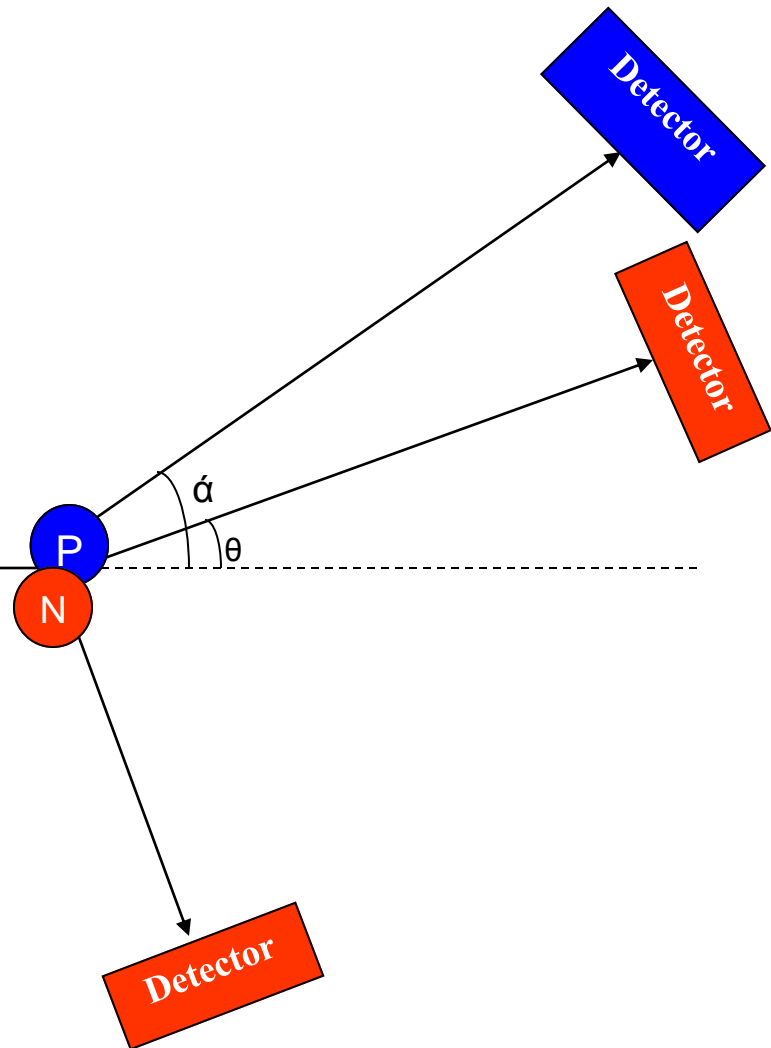


Three-Nucleon Force

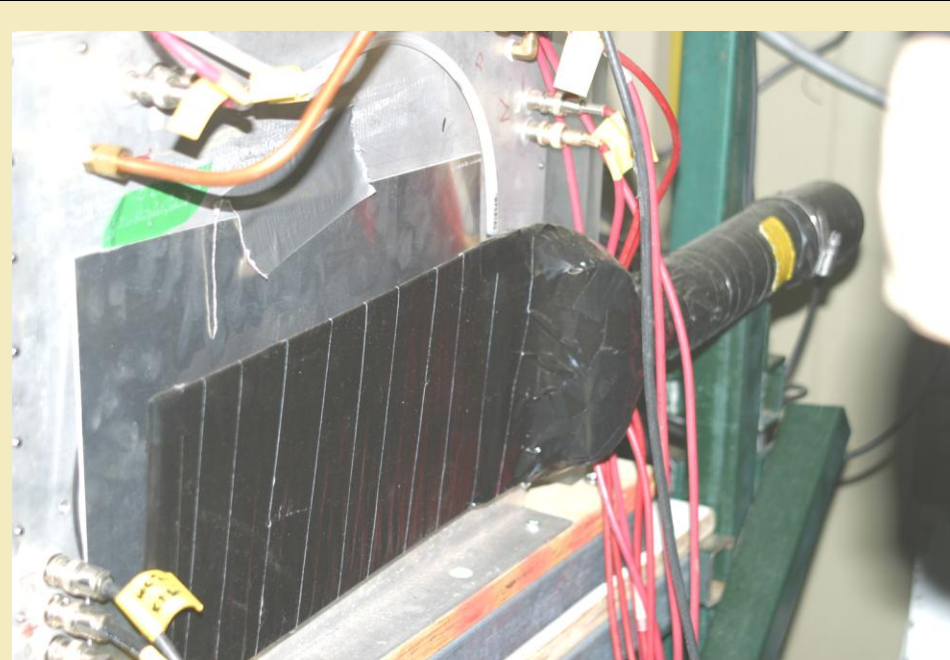


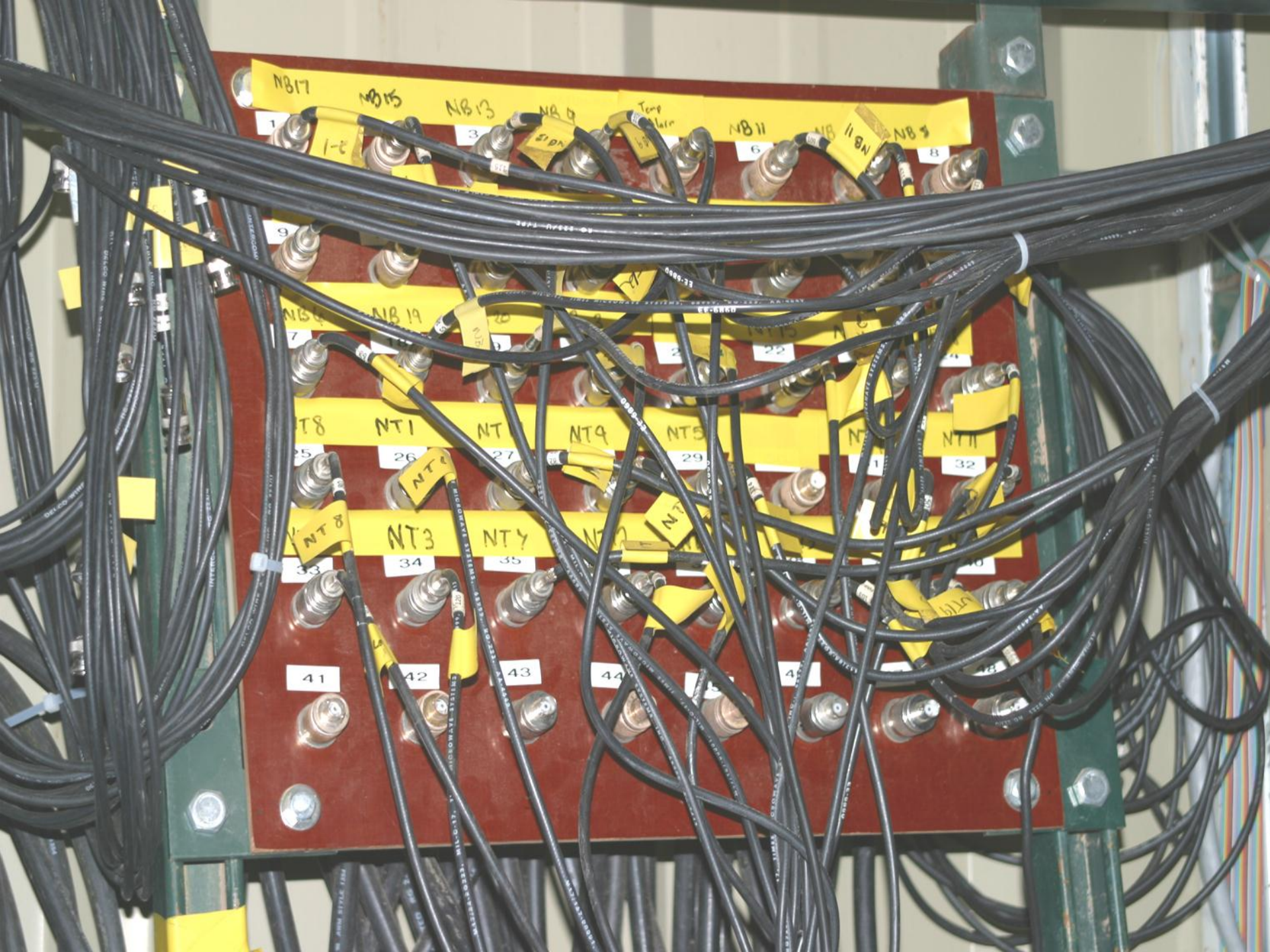
Neutron-Deuteron Breakup

Accelerator









NB17

NB15

NB13

NB11

NB9

NB8

NB7

NB6

NB5

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

NB4

NB3

NB2

NB1

NB0

NB-1

NB-2

NT8

NT1

NT2

NT4

NT5

NT6

NT7

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NT8

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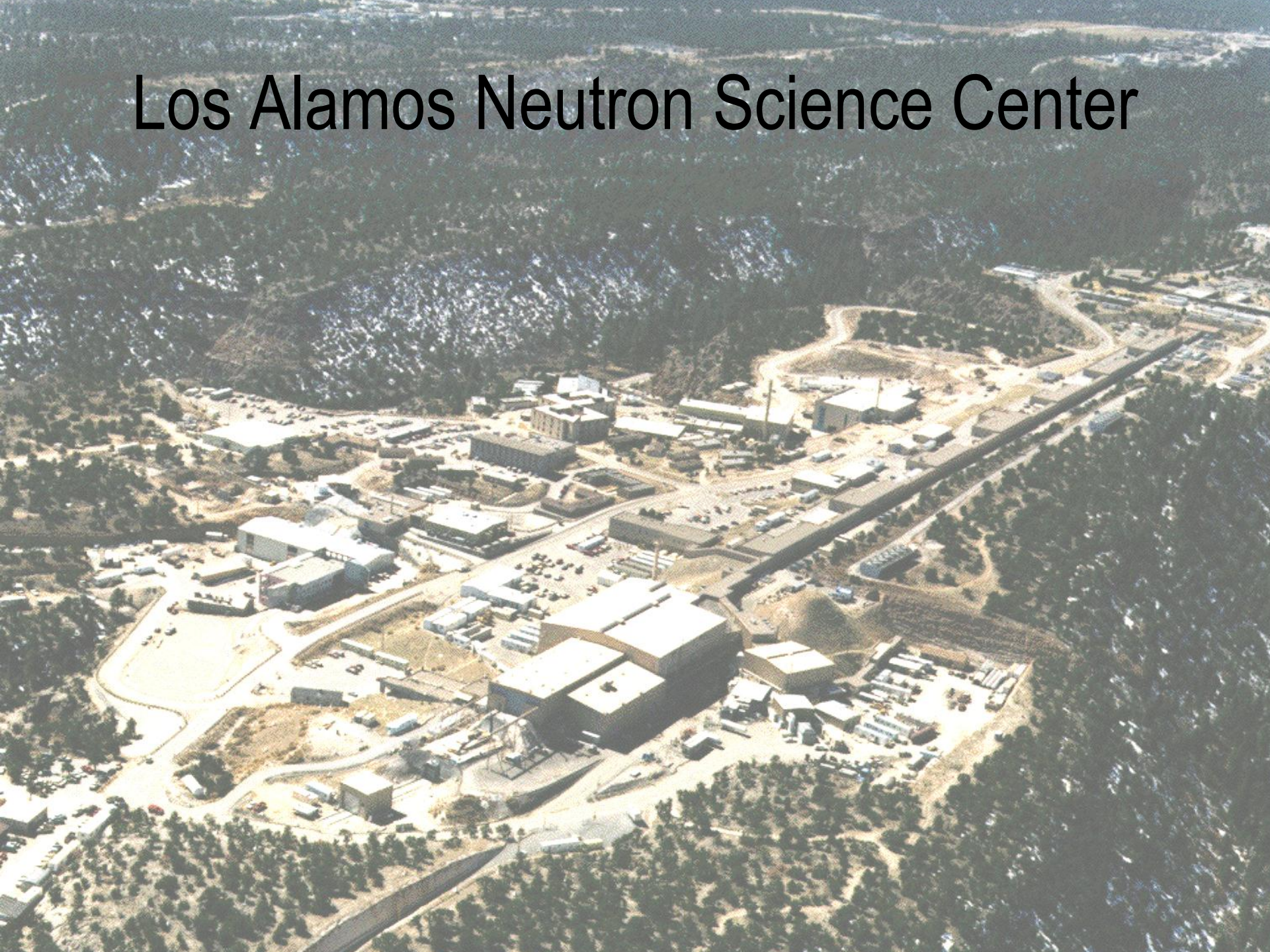
Pueblo's Cliff Dwellings





EXTREME DANGER
AREA CLOSED TO ENTRY

Los Alamos Neutron Science Center

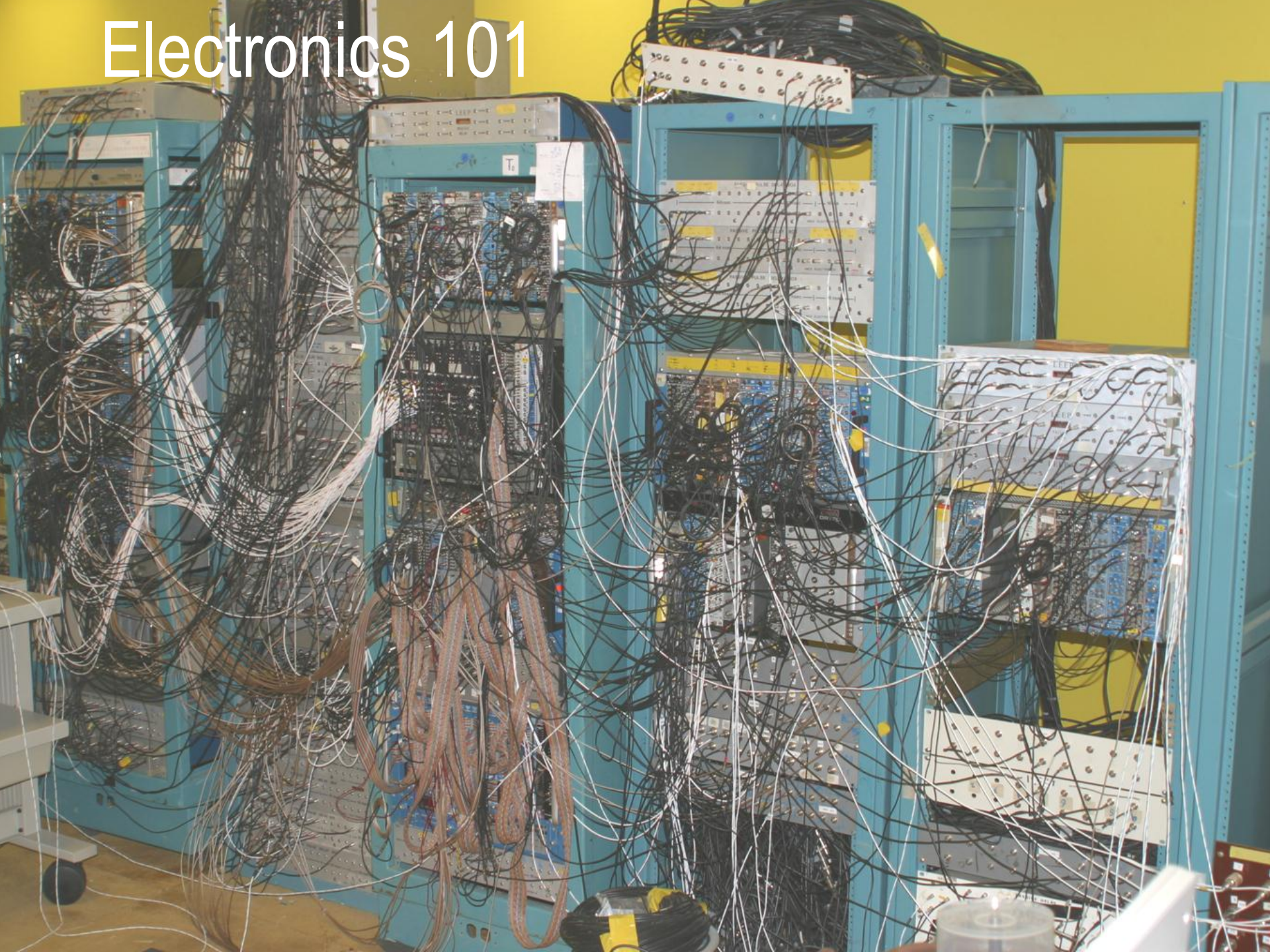


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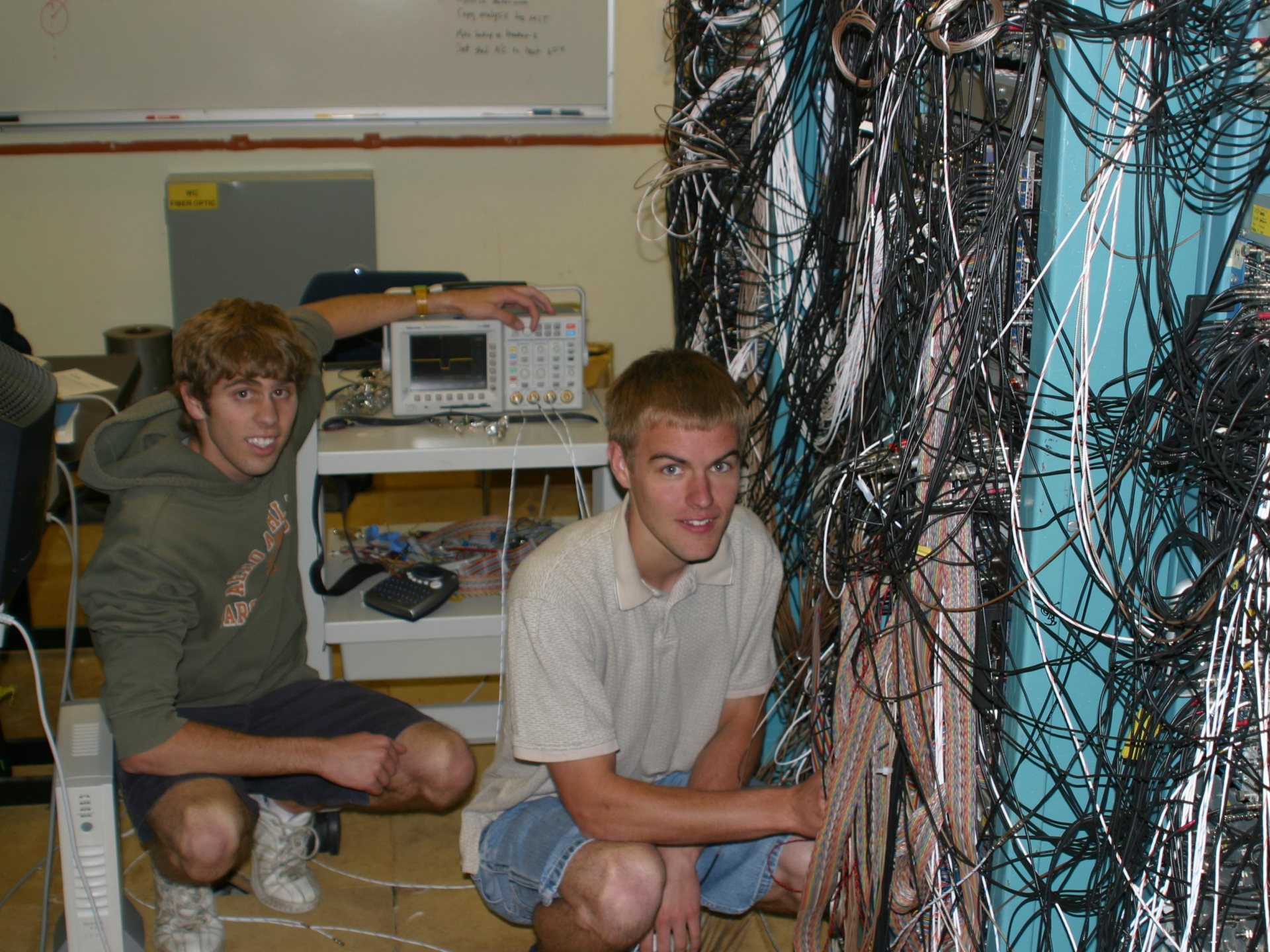


Photo taken from Google Earth

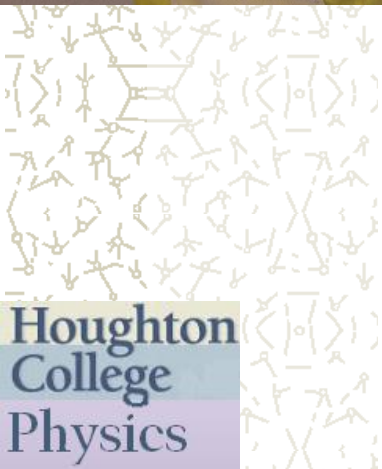
Electronics 101



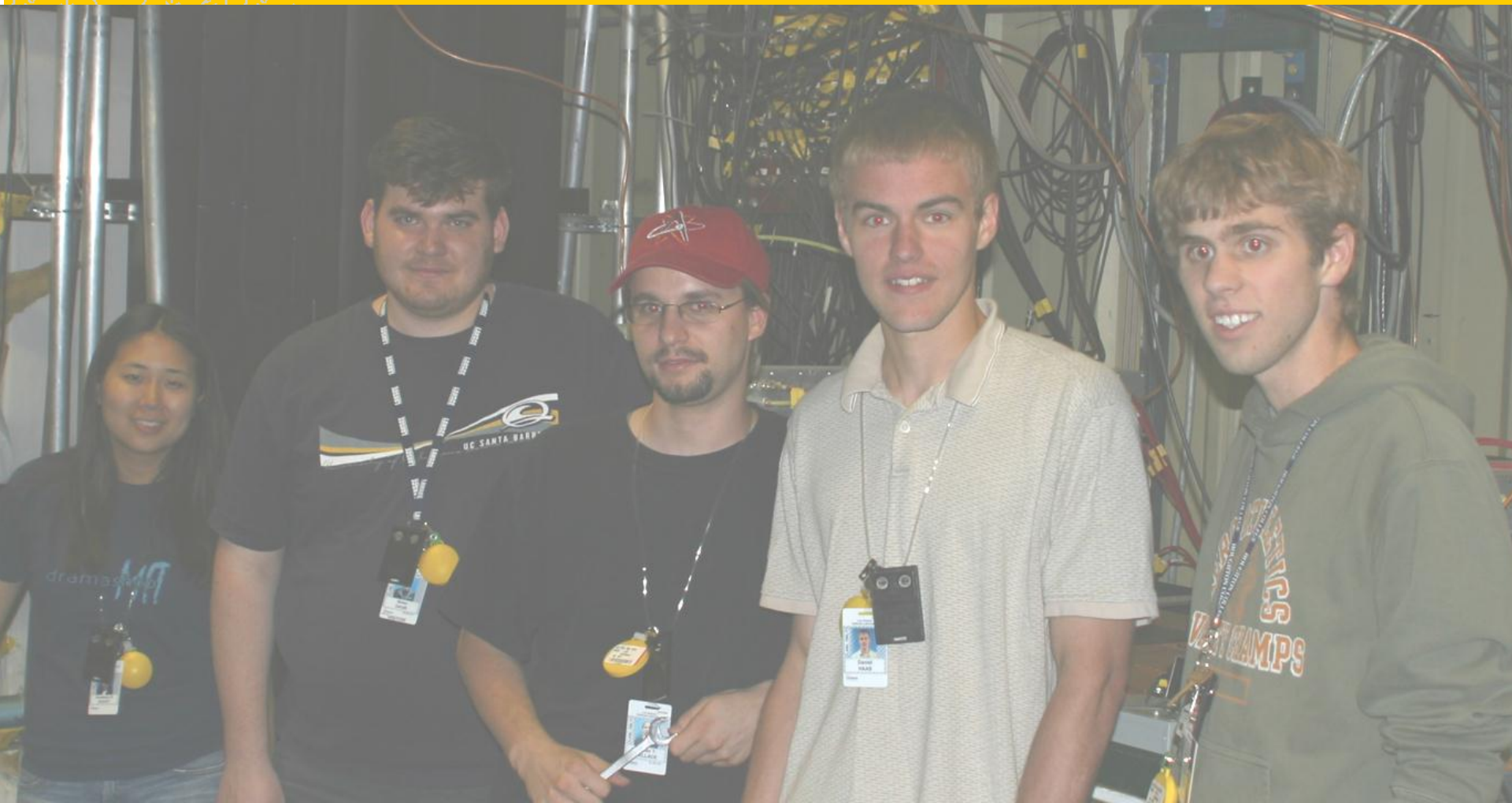
Copy analysis for ACCT
After looking at the results
Call the AC to the next step



Training



Teamwork



Meeting Physicists



World of Physics Research

