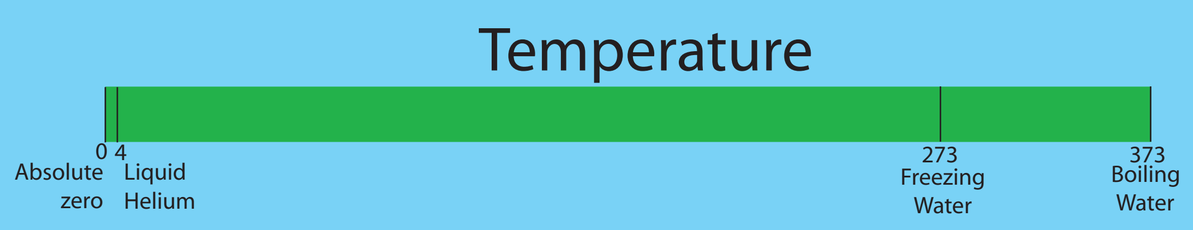
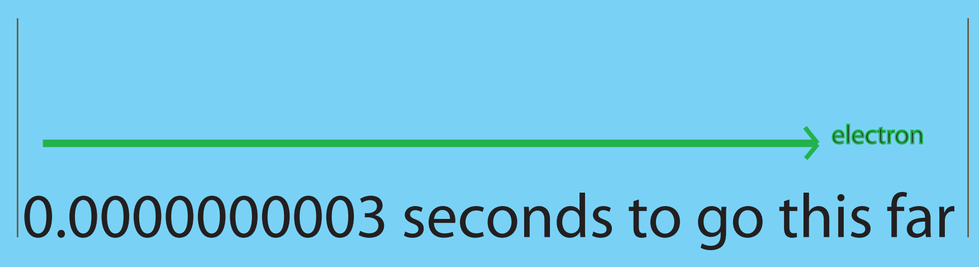
COOL (AND HOT) FACTS ABOUT HALL C

HELIUM IS COLD!



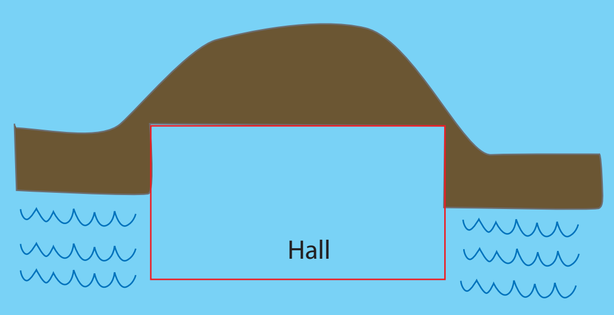
The liquid helium that is used to cool the superconducting magnets and the accelerator structures is almost 100 times colder than regular water ice.

BEAM GOES FAST!



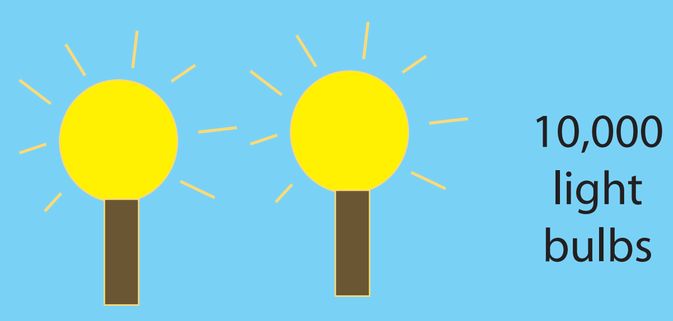
The electron beam moves at almost the speed of light. It would take only one second for the beam to go all the way around the world eight times.

HALL IS UNDERWATER!



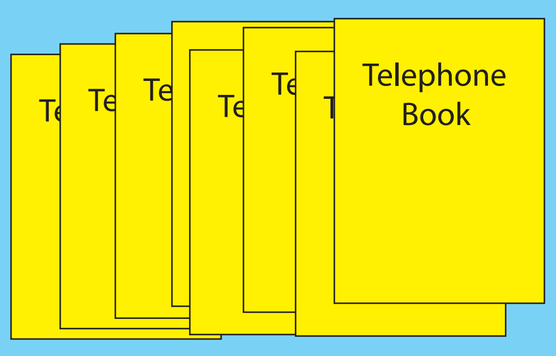
Most of the Hall is below the level of the water table. It is like a giant tub carefully weighted down and braced to withstand the huge pressure of water. Don't poke a hole in the wall!

BEAM IS POWERFUL



The electron beam used in most experiments has the same amount of power of 10,000 one-hundred watt light bulbs, all focused into a beam thinner than a human hair.

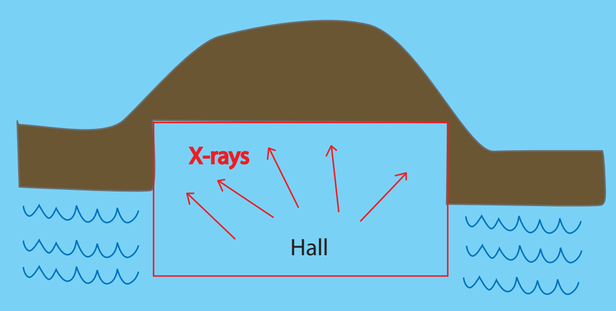
DATA VOLUME IS HUGE



one every second!

Experiments typically collect as much information as in a telephone book every second. That adds up to over one million telephone books worth of data to process per month. JLab has hundreds of computers for this job.

HALL IS HOT!



When the beam is on, the Hall is full of radiation, about the same as one trillion (a million million) dental X-Ray machines all working at once. The big mound of dirt over the Hall stops the radiation from reaching people.