- 1. Self-shielding Detectors how does affect conventional facilities?
- 2. Cooling by air systems
  - a. Temperature Requirements and tolerances
    - i. Detector
    - ii. Power supply rooms
    - iii. Computer and Control rooms
  - b. Air flow requirements and delta T
  - c. Humidity Requirements and tolerances
  - d. Heat loads to air by area
  - e. Air exchange rates and purge requirements as it relates to heavier or lighter than air gas use. Hazardous or flammable gas.
- 3. Cooling by water systems
  - a. System types, ICW, warm LCW, cooled LCW, chilled LCW, chilled water (CHW)
  - b. Temperature requirements and tolerances
  - c. Water flow requirements and delta T
  - d. Heat loads to water by system and area
- 4. Cryogenic use as it relates to conventional mechanical, electrical, and space requirements
- 5. Electrical Power Requirements (in watts)
  - a. Experimental Systems power requirements includes detectors, electronic, control rooms, etc.
  - b. Power Supplies
  - c. Primary and "out of beam" detectors
  - d. Grounding (isolation of grounding systems)
- 6. Fire Protection/Life Safety Systems
  - a. Use of suppression gases, where, required volumes
  - b. Sprinkler systems
  - c. Fire detection spot type, VESDA, line type heat detection