

# Elements of the proposals

- General science case for the cold neutron fundamental physics  
(Based on June 2000 North Carolina Workshop)
- Descriptions of several experiments that are likely candidates for use of the beam line (need to make a strong case why the SNS rather than continue at LANSCE or NIST)
  - ✓  $n + p \rightarrow d + \gamma$  **Seppo Pentilla et.al.**
  - ✓ **Neutron Spin Rotation** **Blayne Heckel et.al.**
  - ✓ **Neutron Decay Correlations** **Scott Wilburn et.al.**
  - ✓ **Neutron Lifetime via Trapped UCN** **John Doyle et.al.**
  - ✓ **Neutron Electric Dipole Moment** **Martin Cooper et.al.**
- Description of the beam line including the requirements, cost, and schedule
  - ✓ **Make sure that all foreseeable needs are met**
    - **Include UCNs?**
    - **Include epithermal beamline?**
  - ✓ **As flexible as possible (include options?)**
  - ✓ **Close collaboration with SNS Experimental Facilities group**
  - ✓ **Engineering support**
- Management plan that describes the organization of the IDT and experiment selection processes

# **Who is responsible for what?**

## **Timetable?**

### **End of October (1st drafts)**

**General scientific case**

**Specific experiments, incl. requirements, and why the SNS**

**Decision on proposed layout of beamline (s)**

**Dual beamline?**

**Length?**

**Which specific beam elements?**

**Management (IDT, etc.)**

### **November**

**Circulate drafts**

**Layout of beamline(s)**

**Cost of beamline elements**

### **December**

**Pull proposal together**