Group2:

Training and Education, Instrumentation

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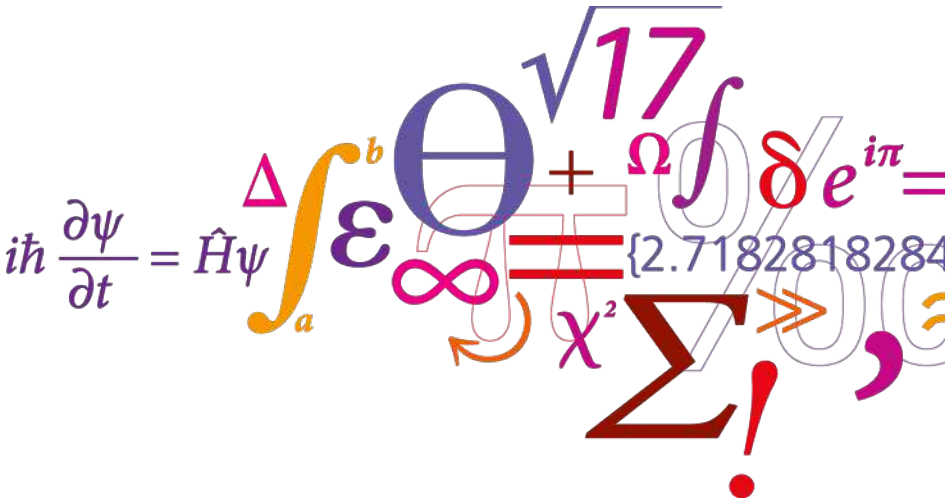

DTU Physics
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a) Possible applications of a CANS at Risø

- **Hands-op** operation, including under-grads (capacity building)

- Provide a test facility:
  - Moderator development
  - Imaging,
  - Feasibility studies
- Year-round flexibility
- Bypass bureaucracy

b) Requirements to a CANS facility

- **TimeOfFlight** is essential for neutron scattering
- Sufficient flux at sample, to make meaningful experiments <1day
- Minimize activation levels
- Possibility to re-configure instruments
- Campus life / guesthouse
- Data aquisition system should be identical to ESS and instruments types should mimick
- Dedicated scientifc (permanent staff) to train students
- Sample environment (Temp,Pressure...)

c) Demand for CANS from Danish and European users

- ESS target: moderator test facility
- Pre-experiment sample testing
- Instrument component testing (optical,detector)
- Easy access for data for algoritm development

d) Possible sources for financing

Investment

- Private founds

Running costs

- Research projects [incl european grants]
- Universities for educational activities
- Danish and Swedish industries?
- Isotope production?

e) Competition: Other facilities and alternative methods

- ESS is not a competition
- X-rays is
- Anything lab based is (from a student's perspective)

f) Recommendations for the future process

Investment

- Gain support from major universities
- Approach Danish Industry
- Work out synegies between isotopes and neutron scattering
- Development plan: which instruments first etc

- → **Feasibility study** [~Conceptual Design Report] will likely require some kind of *pre-seed*