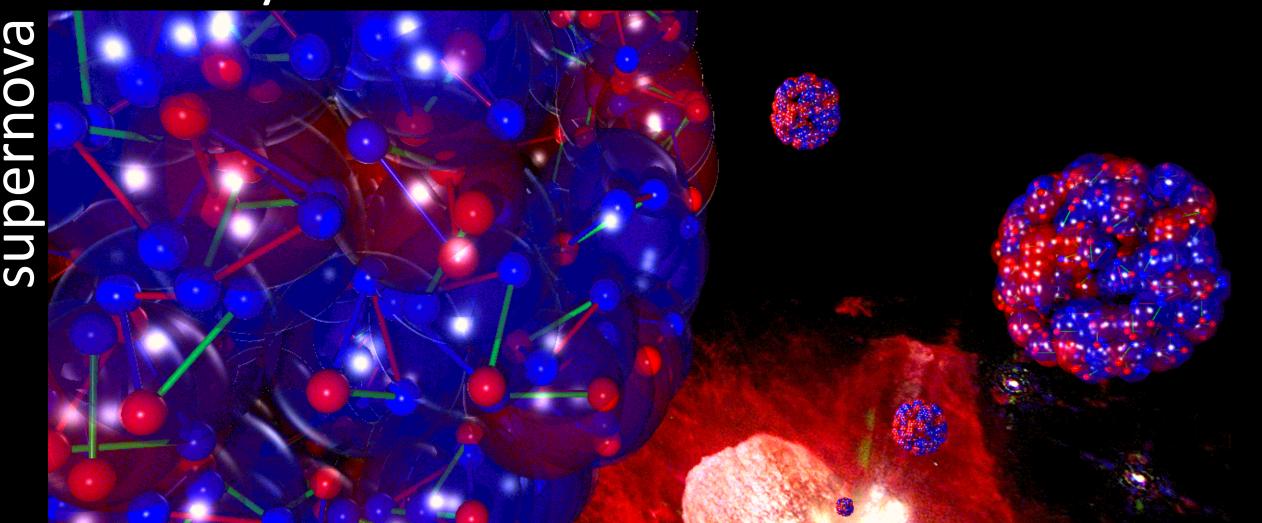
nucleosynthesis



clustering

nuclear



ucleo

structure



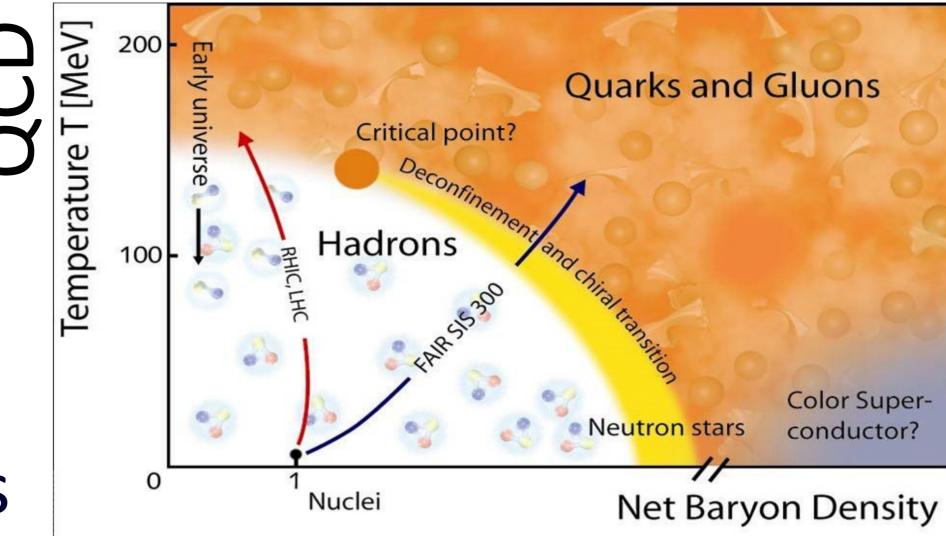
• Analyze Experimental Data symmetries

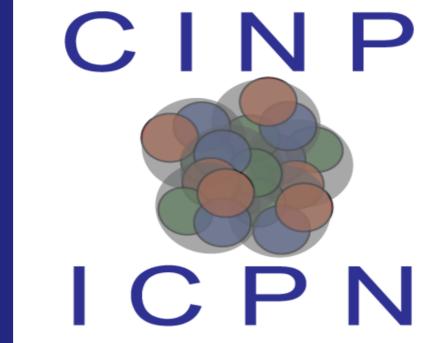
 Develop Simulation Software Attend Workshops/Conferences

Construct Detectors

- Develop new theoretical models
- Participate In Experimental Data Collection
- Do Experiments at National and International Laboratories
- Gain Valuable Experience with Digital and Analog Electronics

Opportunities for graduate work in phase diagram nuclear physics





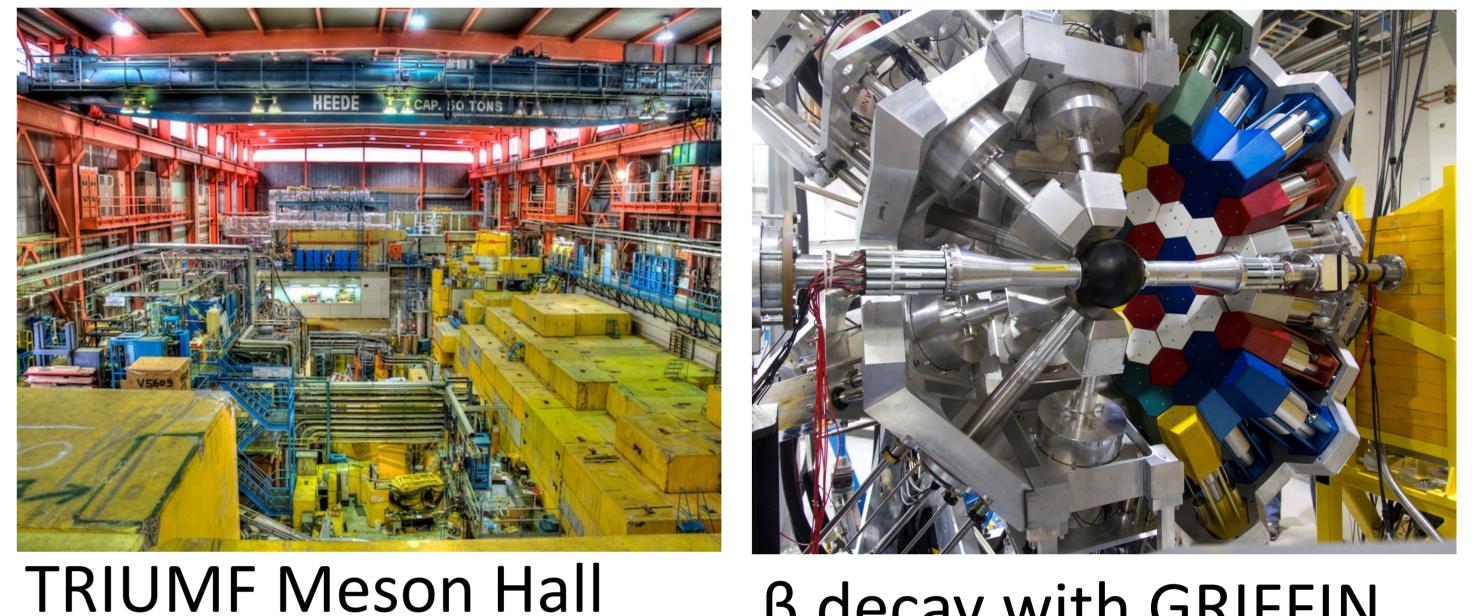
Canadian Institute of Nuclear Physics Institute Canadien de Physique Nucléaire

TRIUMF

The ISAC facility at TRIUMF is a world leader in the emerging technology of radioactive ion beams.

Examples of exciting study include:

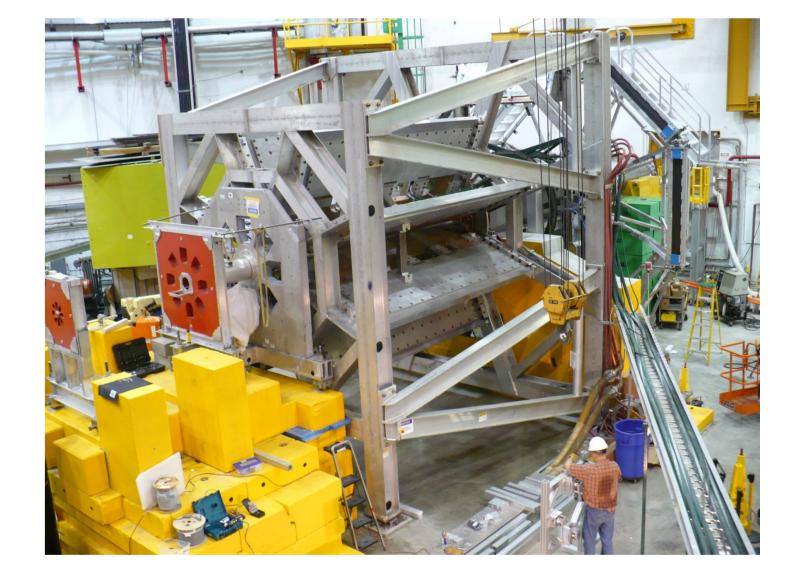
Radioactive isotope trapping (TITAN and TRINAT)



β decay with GRIFFIN

- Nuclear Astrophysics studies with DRAGON and EMMA
- The world's most intense source of ultra-cold neutrons (UCN) will allow for a searches of new physics beyond the Standard Model
- ARIEL will permit high-precision studies of nuclear structure





Qweak, during installation



Annika Lennarz, at BGO array

CINP Institutions

Saint Mary's University Mount Allison University McGill University University of Guelph

University of Manitoba University of Winnipeg University of Regina TRIUMF

Nuclear Theory

Jefferson Lab

Explore the structure and behavior of The world's leading electron accelerator facility, capable of providing a highly stable, highly polarized electron beam. strongly interacting matter, help form a Now with a maximum beam energy of 12 GeV, Jefferson Lab quantitative description of nuclei from will make profound contributions to the study of nuclear the properties of Quantum Chromomatter, including: dynamics.

- Lattice QCD
- Relativistic heavy ion theory
- Calculations of nuclear structure
- Chiral Perturbation Theory
- Studies of gluonic excitation and guark confinement
- Nuclear and nucleon structure measurements
- Exclusive scattering cross-section measurements
- Tests of the Standard Model of Electroweak interactions