

CINP Scientific Working Group (SWG) Terms of Reference

NAME OF THE WORKING GROUP

Nuclear Theory

SCOPE, MISSION AND GOALS OF THE SCIENTIFIC WORKING GROUP

The SWG on Nuclear Theory provides a forum for all Canadian nuclear physicists interested in all aspects of nuclear theory and its impacts upon other fields of inquiry. For example, many-body theory is a universal approach leading to equation of state calculations on the lattice using effective field theories at finite temperature, and these equations of state in turn impact many fields, from nuclear structure to astrophysics. Similarly, nuclear theory has much to contribute to precision physics, such as super allowed beta decay, weak charge measurements in heavy atoms, neutron radius measurements using parity violating electron scattering, and nuclear corrections to long baseline neutrino oscillation data. It also contributes much to our understanding of nuclear matter under extreme conditions such as Quark-Gluon Plasma created in relativistic heavy ion collisions, and the core of neutron stars.

The main aims of the working group are:

- to facilitate communication and collaboration within the community by organizing workshops and topical sessions at conferences,
- to foster the interaction with closely related communities such as high energy, astrophysics and cosmology,
- to initiate and coordinate planning for theoretical and experimental initiatives in nuclear theory,
- to disseminate research results to the public and students, and
- to assist in the recruitment of graduate students and new faculty in the field.

MEMBERSHIP

Any Faculty or Associate Member of the Institute is eligible for membership in the SWG.

OFFICERS

1. The SWG shall have a Chair, who will be responsible for the SWG membership under the general direction of the CINP Board of Directors. The SWG shall also ensure that any necessary secretarial duties are performed by its members.

2. Selection of Chair.

The SWG Chair shall be elected by its members by secret ballot, or an Acting Chair appointed by the Board until an election can be held. Each member of the SWG shall be entitled to cast one vote. The CINP Executive Director shall receive and count the ballots and shall be responsible for reporting the outcome of the election.

3. Length of Term.

The term of office for the SWG Chair shall normally be five years from the date of the annual meeting of the Individual Members. The rationale for this term length is that it coincides with the mandatory 5 year review of the SWG by the Board (below). The appointment will normally begin in the year prior to the formation of the Subatomic Physics Long Range Plan. A Chair may hold only one additional consecutive term unless otherwise approved by the CINP Board of Directors.

4. SWG Chair Duties.

- be the main point-of-contact for the SWG membership.
- help facilitate the CINP scientific program, for example by contributing material to or suggesting authors for the CINP website and newsletter, and helping organize workshops.
- help write the CINP Brief for input to the NSERC Subatomic Physics Long Range Plan, and to provide input on other CINP activities, such as the annual presentation at NSERC Large Projects Day and the AGM.
- act as an adviser to the CINP Executive Director on related scientific issues, such as liaison with corresponding divisions of CAP.
- work together with the CINP Executive Director and other SWG Chairs on issues related to funding, long-range planning, and outreach.
- encourage people to join CINP, and to participate in the SWG.
- meet periodically with the Executive Director and the other SWG Chairs, to give and receive updates of CINP and SWG activities of greatest relevance to the above duties. These meetings will be held in accordance with Sec 5.G.2 of the CINP bylaws.
- serve on CINP committees, as required.

REPORTS

When requested, the SWG shall submit a work-plan, annual report, and a budget for the forthcoming fiscal year to the Board of Directors. Both the work-plan and the annual report shall include descriptions of the ongoing and anticipated activities and projects of the SWG. These updates will normally be presented to the general CINP membership at the annual meeting of the Individual Members.

REVIEW

In accordance with the CINP general bylaws, a review of the activities and progress of the SWG shall be conducted from time to time but at least once every 5 years by the Board of Directors. This review is to ensure that the SWG remains relevant to the affairs of the Institute, and that no urgent issue related to the mission of the Institute has been neglected. The SWG will assist and co-operate fully with the Board on this review.

Approved by the CINP Board March 29, 2021