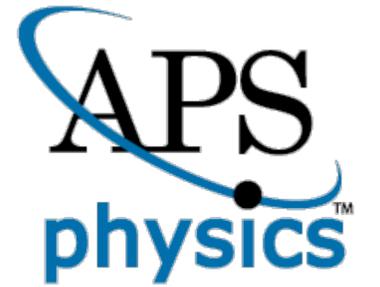


The Role of the Division of Nuclear Physics in the NP Long Range Plan



J.F. Wilkerson

DOE/NSF Nuclear Science Advisory Committee Meeting
November 16, 2021



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

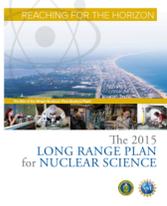


DNP facilitates engagement of the community

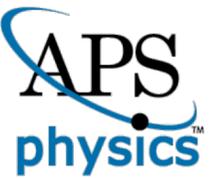
- Communicates the LRP process to the community.
- DNP is responsible for organizing the community Town Meetings:
 - Formulates topics, general schedule, and planning for Town Meetings.
 - Executive Committee nominates conveners for each Town Meeting topic.
 - “Oversees” the process (makes sure that process is moving forward).
 - Provides guidance as needed to the conveners.
 - Provides modest financial support for each Town Meeting.
 - Works closely with the NSAC Chair during the process.
- Town Meeting Conveners responsible for:
 - Forming representative organizing committee (typically 10-20 people)
 - Details of meeting organization including the web page and engaging their communities.
 - White paper submitted to the LRP working group.
- DNP organizes community wide meetings as either part of the DNP Fall and/or APS April Meetings or special meetings.
- DNP Chair serves on NSAC and represents the community.

DNP Town Meetings

- 2002
 - Nuclear Structure and Astrophysics, Oakland, CA
 - Astrophysics, Neutrinos, and Symmetries, Oakland, CA
 - Electromagnetic and Hadronic Physics, JLAB
 - High Energy Nuclear Physics, BNL
 - Science Education and Outreach White Paper (no separate Town Meeting)
- 2007
 - Nuclear Astrophysics and the Study of Nuclei, Chicago, IL
 - Nuclear Science and the New Standard Model: Fundamental Symmetries and Neutrinos in the Next Decade, Chicago IL
 - Phases of QCD, Rutgers University
 - Hadronic Physics, Rutgers University
 - A Vision for Nuclear Science Education and Outreach for the Next Long Range Plan, BNL
 - Nuclear Science Enhancing American Competitiveness Through Basic Research, Chicago, IL
- 2015
 - Education and Innovation in Preparation fo the 2015 Long Range Plan, NSCL/MSU
 - Nuclear Structure and Nuclear Astrophysics Meeting, Texas A&M
 - Fundamental Symmetries, Neutrinos, Neutrons, and Relevant Nuclear Astrophysics, Chicago, IL
 - Hadron and Heavy Ion QCD Meeting, Temple University



Long Range Plan Town Meetings



EDUCATION AND INNOVATION IN PREPARATION FOR THE 2015 LONG RANGE PLAN

August 6–8, 2014

Conveners:

Michael Thoennessen (Michigan State University),
Graham Peaslee (Hope College)

Venue: NSCL, Michigan State University

Website: <http://meetings.nscl.msu.edu/Education-Innovation-2014>

NUCLEAR STRUCTURE & NUCLEAR ASTROPHYSICS MEETING

August 21–23, 2014

Nuclear Structure Conveners:

Mark Riley (Florida State University) and Charlotte Elster (Ohio University)

Nuclear Astrophysics Conveners:

Hendrik Schatz (Michigan State University) and Michael Wiescher (University of Notre Dame)

Venue: Mitchell Institute, Texas A&M University

Website: <http://www.lecmeeting.org/>

HADRON AND HEAVY ION QCD MEETING

September 13–15, 2014

QCD Heavy Ion Conveners:

Paul Sorensen (Brookhaven National Laboratory) and Ulrich Heinz (Ohio State University)

QCD Hadron Conveners:

Haiyan Gao (Duke University) and Craig Roberts (Argonne National Laboratory)

Venue: Temple University, Howard Gittis Student Center, 1743 N 13th Street, Philadelphia, PA 19122

Website: <https://phys.cst.temple.edu/qcd>

FUNDAMENTAL SYMMETRIES, NEUTRINOS, NEUTRONS, AND THE RELEVANT NUCLEAR ASTROPHYSICS

September 28–29, 2014

Conveners:

Hamish Robertson (University of Washington), Michael Ramsey-Musolf (University of Massachusetts)

Venue: Crowne Plaza Hotel near Chicago's O'Hare Airport on 5440 North River Road, Rosemont, IL 60018

Website: <http://fsnutown.phy.ornl.gov/fsnuweb/index.html>

Other Meetings of Interest

High Performance Computing (Computation in Nuclear Physics), Washington DC, July 14–15, 2014

Authors: A. Burrows, J. Carlson, W. Detmold, R. Edwards, R. Furnstahl, W. Haxton, W. Hix, F. Karsch, W. Nazarewicz, P. Petreczky, D. Richards, M.J. Savage

Website: <https://www.jlab.org/conferences/cnp2014/index.html>

Timeline from the 2014-2015 Process

- April 2014 (0 m) — NSAC Charge letter
- May 2014 (1 m)
 - DNP chair-line starts organizing and involves Executive Committee
 - Executive Committee (with feedback from the sub-communities)
 - ▶ Agrees and selects Town Meeting Topics
 - ▶ Nominates conveners
 - DNP Chair contacts conveners
- June 2014 (2 m)
 - General email to the community outlining the process, announcing the Town Meetings, and inviting engagement.
- August - September 2014 (4-5 m)— Town Meetings conducted
- October 2014 (6 m)— Special LRP Community Update at the DNP Fall meeting
 - Talks by NSAC Chair, DNP Chair on the process, and brief reports from conveners of each Town Meeting.
- January 2015 (9 m)
 - White papers for each Town Meeting submitted
- October 2015 (18 m)
 - DNP Fall Meeting Plenary Session Devoted to LRP (ultimately the decision of the DNP Chair)
 - ▶ 6 talks, 25 minutes each.

Note: Process typically spans the terms of two DNP Chairs.

Thoughts on the upcoming process

- Important to represent communities of all sub-fields
 - depends on the makeup of NSAC and DNP Executive Committee
- Worth broadly considering Town Meeting topic areas
 - For Nuclear Structure and Nuclear Astrophysics, a change in dynamic with large and growing FRIB community.
 - Need to strike a balance between too few and too many town meetings
 - Many researchers with interests in multiple topics, previous LRPs have co-located Town Meetings
- Communities with existing inclusive national user facilities and groups are well positioned to have their views heard. Conversely there are challenges with representation of parts of the field that do not have a major home laboratory as a champion.
 - Fundamental symmetries and Neutrinos put together an ad-hoc email list in addition to general DNP mailings.
- Consider the impact of hybrid (in-person & virtual) meetings
 - At previous Town Meetings and LRPs face-to-face discussions during breaks and discussion times were an essential part of the process.
 - Possible restrictions on travel
 - The timing of the process and when DNP Fall and April meetings occur will influence community wide meetings.
- Software tools to facilitate communication and discussion have advanced significantly since last LRP
 - Slack, Confluence, APS Communities Tool and Digest ...
 - Should DNP adopt/recommend a standard for all Town Meetings? (Snowmass)

Backup Slides

Plenary Session, Fall DNP Meeting 2015

- Session A
 - Don Geesaman, overview of LRP report and recommendations
 - Gordon Cates, Cool QCD
 - Jamie Nagle, Hot QCD

- Session B
 - Witek Nazarewicz, Nuclear Structure
 - George Fuller, Nuclear Astrophysics
 - Brad Filippone, Fundamental Symmetries, Neutrinos, and Neutrons

6 talks, 25+5, speakers were based on the conveners from the town meetings and/or the LRP resolution meeting (followed DNP invited speaker guidelines)