





The Inter-American network of networks of QCD challenges

AccelNet: Accelerating Research through International Network-to-Network Collaborations



Program goals

(1) Develop strategic partnerships across the various physics research networks in the Americas to tackle QCD challenges;

(2) Identify the needs, strengths and synergies of network partners for developing large scale science projects in the US;

(3) Design activities for researchers in the U.S., Canada, and Latin America that will facilitate leveraging complementary resources for QCD research, and

(4) Enhance the training of the next generation of researchers in a novel set of skills that include international multi-team experience.



Research areas related to QCD

- Accelerator technologies
- Theory
- High performance computing
- Particle detectors, instrumentation and electronics
- Real-time event selection
- Software development, and development of Monte Carlo simulation
- AI and QIS tools

Kick-off meeting at CFNS on Dec 16, 2021 120 participants https://indico.bnl.gov/event/13562/

List of invited networks

participate

- <u>Electron-Ion Collider User Group</u>
- Jefferson Lab Users Association
- <u>RHIC and AGS User's Group</u>

Network of Networks

- US LHC Users Association
- Association of Latin American Nuclear Physics and Applications (ALAFNA),
- Southeastern Universities Research Association (SURA)
- Latin American Association for High Energy, Cosmology and AstroParticle Physics
- Nuclear Physics and Applications (INCT-FNA)
- Rede Nacional de Física de Altas Energias (RENAFAE)
- <u>Mexican Particle Accelerator Community (CMAP)</u>
- <u>EIC-Canada Collaboration</u>
- <u>California EIC Consortium</u>

A Metwork of Networks er-American CD List of invited network partners We are <u>an open network:</u> future networks can also participate

- <u>Center for Frontiers in Nuclear Physics (CFNS)</u> at Stony Brook University & Brookhaven National Laboratory
- The Electron-Ion Collider Center at Jefferson Lab
- <u>Center for Accelerator Science at Old Dominion University</u>
- The ICTP South American Institute for Fundamental Research (ICTP-SAIFR)
- <u>Canadian Institute of Nuclear Physics</u>
- TRIUMF. Canada's Particle Accelerator Center
- The Institute of Nuclear Theory
- <u>Center for Nuclear Femtography</u>

American Retwork of Networks -American Community-led program Some examples of activities of interest

- Support to organize workshop, conference, summer schools
- Support for research visits
- Mobility
 - US person \rightarrow to Canada or Latin America
 - Canadian or Latin American person \rightarrow to US
- Support White Papers or community-led documents preparations
- Young scientists-led events
- Projects that promote development of early-career researchers
- Activities that promote better communication channels



IANN-QCD contacts

- **Program coordination:** Daniel Tapia Takaki, Christine Aidala, Carlos Bertulani, Jean Delayen, and Abhay Desphande
- Your network representatives (see list of invited networks)
- National contact people: Daniel de Florian (Argentina), William Brooks (Chile), Irais Bautista (Mexico, theory) and Gerardo Herrera Corral (Mexico, Experimental)

Inquiries about this call should be directed to:

Dr. Daniel Tapia Takaki jdtt@ku.edu For specific inquiries to explore research opportunities can also be directed to:

• Research opportunities in the EIC project Dr. Abhay Desphande <u>abhay.deshpande@stonybrook.edu</u>



- Research opportunities in the experimental QCD program Dr. Christine Aidala <u>caidala@umich.edu</u>
- Research opportunities in accelerator science and technologies Dr. Jean Delayen <u>delayen@jlab.org</u>
- Research opportunities in the theoretical and computing QCD program
 Dr. Carlos Bertulani
 carlos.bertulani@tamuc.edu



International Advisory Board

- Prof. Luisa Cifarelli (University of Bologna, Italy)
- Prof. Barbara Erazmus (SUBATECH, IMT Atlantique, CNRS/IN2P3, France)
- Prof. Paolo Giubellino (GSI and Technische Universität Darmstadt, Germany)
- Prof. Oliver Kester (TRIUMF, Canada)
- Prof. Jorge López (The University of Texas at El Paso, USA)
- Prof. Luciano Maiani (Sapienza University of Rome, Italy)
- Prof. Robert McKeown (Jefferson Lab and College of William and Mary, USA)
- Prof. Larry McLerran (INT and University of Washington, USA)
- Prof. Veronica Riquer (Sapienza University of Rome, Italy)
- Prof. Alberto Santoro (Rio de Janeiro State University, Brazil)
- Prof. Robert Tribble (Brookhaven National Lab and Texas A&M University)



Supported activities

http://www.iann-qcd.org

- For this call, IANN-QCD is interested in supporting the following types of activities:
- Activity 1: Exchange visit programs
- Activity 2: Early-stage research projects
- Activity 3: Participation or organization of scientific meetings
- Activity 4: Strategic partnerships



Upcoming events in 2024

- Capacity building workshop for early career researchers in QCD in Washington DC
- More info will be announced by early January



New directions

- We are considering opening more targeted calls for proposals. After the capacity building workshop with ECA, we expect they will create some "working groups" to suggest some specific proposals
- Currently exploring a joint call for proposals with other international networks, including from any continent
- I.ANN QCD is a community-led network of networks. Your inputs and engagement are essential for making it a success



Useful links

Please help us advertising this program and get engaged !

Website: https://www.iann-qcd.org

Join the IANN-QCD Mailing list https://www.iann-qcd.org/mailing-list

LinkedIn group https://www.linkedin.com/groups/12692187/