

Science Week - 2019



Monday, August 19, 2019 - Friday, August 23, 2019

TRIUMF

Scientific Program

High Level Program Overview
Monday, August 19, 2019: IAMI Summer School

The one-day IAMI Summer School will give attendees an opportunity to learn more about the new Institute for Advanced Medical Isotopes (IAM I) currently under construction at TRIUMF. The program is primarily aimed at graduate students with morning lectures by leading experts which will introduce the science reach of IAM I and provide an opportunity for the whole TRIUMF community to learn more about IAM I. In the afternoon hands-on activities are offered: a lab course in our radiochemistry labs (limited number of attendees) and an outreach workshop covering medical physics for radiation therapy. Together it will enable the nuclear medicine community to foster new collaborations around this exciting new facility.

Organizing committee: Cornelia Hoehr (TRIUMF), Valery Radchenko (TRIUMF), Monika Stachura (TRIUMF), Christian Diget (University of York)

Tuesday, August 20, 2019: CANREB Workshop

The Canadian Rare Isotope Facility with Electron Beam Ion Source (CANREB) provides high charge-state beams suitable for injection into the ISAC accelerator complex for use in reaccelerated-beam experiments at ISAC-II. It is anticipated that CANREB will be available for experiments from 2020 onwards.

The goal of the CANREB workshop is to prepare the ISAC community for first science with this new infrastructure. Specifically, the workshop will:

Review the beam characteristics expected from CANREB in 2020;

Review existing approved experiments and Letters of Intent that require, or would benefit from, the beams provided from CANREB;

Discuss new experiments and experimental programs that would fully exploit CANREB's capabilities;

Anticipate and prepare for challenges associated with CANREB bunched beams;

Identify the best cases for “first science” with CANREB.

We encourage the ISAC community to submit contributions. Those wishing to speak on experiments and science programs are welcomed to submit brief (one page or less) abstracts on their topics.

Abstracts should be submitted as pdf files by email to Ritu Kanungo <ritu@triumf.ca> by July 20, 2019.

We will endeavor to accommodate as much user input as possible. Members of the CANREB project team will be invited to address the status of CANREB, and experts familiar with experiments using similar devices will be asked to participate in the discussion of experimental challenges.

Organizing committee: Gerald Gwinner (Manitoba), Greg Hackman (TRIUMF), Ritu Kanungo (St. Mary’s, chair), Oliver Kester (TRIUMF), and Kris Starosta (Simon Fraser).

Wednesday, August 21, 2019: ISAC20 Symposium

2019 marks 20 years of rare isotope beam experiments with the Isotope Separator and Accelerator (ISAC) facility. We will celebrate two decades of discovery with rare isotope beams from TRIUMF-ISAC with a symposium that will provide an opportunity to review highlights of the ISAC science programs in nuclear structure, nuclear astrophysics, fundamental symmetries, material and life sciences, and look to the future prospects with ARIEL.

Organizing committee: Gordon Ball (TRIUMF), John Behr (TRIUMF), Bob Laxdal (TRIUMF), Gerald Morris (TRIUMF), Chris Ruiz (TRIUMF)

Thursday, August 22, 2019: TUG Annual General Meeting

The Annual General Meeting (AGM) of the TRIUMF Users Group (TUG) will bring together scientists from across all TRIUMF disciplines to highlight recent research and discuss future perspectives for user-driven science at TRIUMF. The AGM will feature our popular TUG student poster slam competition - prizes will be awarded for best student talks!

*In conjunction with the TRIUMF Users Group Annual General Meeting (TUG AGM), we wish to **invite students to submit abstracts for the Student Poster Slam & Oral Presentation Competition**. Please see information **here** for details on how to apply. Abstracts or questions should be directed to tug@triumf.ca*

Supervisors – please encourage your trainees to attend.

Organizing committee: The TRIUMF Users Executive Committee

Friday, August 23, 2019: Data Science and Quantum Computing Workshop

The Data Science and Quantum Computing Workshop during Science Week will give participants an opportunity to learn more about the latest applications and resources in machine learning and quantum computing in dedicated lectures but also hands on tutorials. In particular, how these tools can apply and enhance our research output in particle, nuclear and accelerator physics, as well as in the life sciences. The workshop is intended to both enable new connections, as well as strengthen existing collaborations between academic and private sector institutions.

Organizing committee: Jens

Dilling (TRIU MF) Olivia Di Matteo (TRIU MF) Wojtek Fedorko (TRIU MF), Oliver Stelzer-Chilton (TRIU MF).

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