

Particle Physics Department Meeting

August 1, 2019

Agenda

- Office space discussion and head count from Trailer FF
- News from leadership retreat
- NRC TRIUMF evaluation report
- Updates from groups and committees
- AOB

Trailer FF Head Count

- Jens has asked for an updated head count of people moving from Trailer FF

	BAE	Affiliate	Emeritus	Postdocs	Graduate Students	Undergrad	Transients/ Visitors
Neutrino	3	1(?) pending approval	4 (infrequent)	4	4	5	5
ALPHA	1	1(?) pending approval	1	3	1 (second sitting in det. facility)	3	1
SuperCDMS		1		2	3		?
Belle-II		1					
Total	4	2-4	5	9	8	8	6

- Ben Smith (from the DAQ group) is also in Trailer FF. Move to ISAC-II?
- Transients/visitors may need ~0.5 desks on average

Further Comments on Office Space

- TRIUMF acts as a Canada-wide hub for the Neutrino group
 - Graduate students and postdocs from Regina, Winnipeg and UVic are often based at TRIUMF
- SuperCDMS also has 1 BAE, 1 postdoc and 3 graduate students already in MOB (some squatting in KEK office)
- Will we have office space for existing and new affiliate scientists?
- Numbers aren't completely stable.
 - Semester to semester fluctuation of undergraduates and visitors
 - Fluctuations of postdocs and graduate student numbers on longer timescales

News from Leadership Retreat

- Appears to be a consensus on proceeding with the “status quo” hiring plan
 - Included 1 new initiative hire for PPD
 - Joint positions not explicitly allocated - may need to initiate these from the university side
- Still waiting for green light on UCN and ALPHA hires
 - Jens plans to talk to Reiner to get green light before next leadership retreat
- Next leadership retreat is in mid-September
- Jens will explain more at the Division Mixer on August 9

NRC Evaluation Report

- Oliver circulated the NRC evaluation report for TRIUMF

Summary Report:

English: <https://nrc.canada.ca/en/corporate/planning-reporting/summary-report-evaluation-triumf>

French: <https://nrc.canada.ca/fr/organisation/planification-rapports/rapport-sommaire-evaluation-triumf>

Evaluation Report

English: <https://nrc.canada.ca/en/corporate/planning-reporting/evaluation-triumf>

French: <https://nrc.canada.ca/fr/organisation/planification-rapports/evaluation-triumf>

Recommendations

Recommendation 1

The NRC should work with TRIUMF and TRIUMF Innovations to diversify commercialization activities (and to expand royalties and patents), to spread and reduce the risk associated with a too-narrow portfolio.

Management Response: Accepted

The NRC, through the Advisory Committee on TRIUMF (ACOT), will work with TRIUMF to identify how it can expand commercialization activities and develop metrics to measure progress. ACOT will provide this advice during the site visits conducted at TRIUMF twice per year and will include the advice and the progress against metrics, and recommendations in the ACOT reports submitted to the NRC.

Recommendations

Recommendation 2

The NRC should work with TRIUMF to identify ways to expand their outreach to regions outside of British Columbia, in an effort to increase both TRIUMF's impact and its base of support. Methods to broaden TRIUMF's reach could include virtual means.

Management Response: Accepted

The NRC, through the Advisory Committee on TRIUMF (ACOT), will review TRIUMF's plans for outreach, as outlined in the TRIUMF Implementation Plan 2020-2025 and identify additional opportunities for expanded outreach as appropriate.

ACOT will provide this advice during the site visits conducted at TRIUMF twice per year and will include the advice, and recommendations in the ACOT reports submitted to the NRC.

Recommendations

Recommendation 3

In order to facilitate understanding and buy-in by TRIUMF staff of planned organizational changes, the NRC should work with TRIUMF to develop and implement a plan for communicating the changes and their expected benefits.

Management Response: Accepted

The NRC, through ACOT, will provide TRIUMF with advice on the development and implementation of a plan for communicating upcoming organizational changes to TRIUMF staff. ACOT will provide this advice during the site visits it conducts at TRIUMF twice per year and will include its advice and recommendations in the ACOT reports submitted to the NRC.

Recommendations

Recommendation 4

The NRC should work with TRIUMF to identify metrics to monitor the implementation and impact of the organizational changes, to ensure outcomes are as expected, and to allow TRIUMF management to make slight changes as needed to achieve outcomes.

Management Response: Accepted

The NRC will work with TRIUMF to identify metrics to monitor the implementation and impact of organizational changes. These metrics will be included in the reports submitted by TRIUMF to the NRC as part of the ongoing monitoring of the contribution agreement (CA).

Mention of Particle Physics

The IPRC found that there are world-class efforts from TRIUMF in all areas in which they perform research. They noted that some are unique or highly unusual, and others position Canada to play a significant role in important international collaborations. Examples identified by the IPRC of TRIUMF's contribution to science excellence in each research area are provided in the text box below:

Particle physics

TRIUMF has leadership roles in the ATLAS collaboration at CERN. This experiment is widely recognized as world class and has produced a large number of scientific publications. ATLAS discovered the Higgs boson, referenced in the Englert & Higgs Nobel prize of 2013. TRIUMF scientists contributed to the Higgs discovery and continue to study its properties. The laboratory is making significant contributions to the upgrades of the ATLAS detector to enable precision measurements of Higgs properties at higher luminosities. These upgrades are done in partnership with researchers at Canadian universities with TRIUMF providing key infrastructure and expertise.

TRIUMF scientists are core members of the T2K collaboration that has observed, and is now characterizing, neutrino oscillations. TRIUMF scientists have been key to the observation of the $\nu_{\mu} \rightarrow \nu_e$ flavor transformation and to exclusion of the CP conserving phase at 95% CL in 2017. The T2K collaboration was awarded the Breakthrough Prize in Fundamental Physics in 2016.

TRIUMF is making significant contributions in precision tests of fundamental interactions. The ALPHA program has established the formation, trapping, and precision spectroscopy of anti-matter and is one of the highlights of the research program. The next steps, ALPHA-2 and ALPHA-g, will look for evidence of CPT violation and will test the limits of Einstein's equivalence principle. The ALPHA-Canada team was awarded the Polanyi Prize in 2013.

Project News

- ATLAS
- T2K/HyperK
- UCN
- ALPHA
- SuperCDMS
- Pienu
- NA62
- DEAP
- SNO+
- EXO
- HALO
- g-2
- Belle 2
- Theory

Committee Reports

- IPP
- New Initiative Planning
- Seminar/Colloquia
- Safety
- Space
- 5S
- Academic
- Summer schools
- Health & Wellness
- Data Science
- Diversity committee
- Physical Sciences Division Structure
- PPR Working Group

AOB

- Next meeting is scheduled for 9/5