Minutes

of the

Meeting of Individual Members

of the

Institute of Particle Physics

14:30, 13 June 2004 Winnipeg

Approximately 35 members were present. The Director, R. Keeler, chaired the meeting.

- 1. The following agenda was adopted:
 - 2. Minutes of the previous meeting
 - 3. Matters arising from the minutes
 - 4. Election of new council members
 - 5. Financial report
 - 6. Report of meetings of Institutional Proxies and Trustees
 - 7. Director's report
 - 8. Director Search
 - 9. Report from the NSERC GSC 19 Chair (Dean Karlen)
 - 10. i) Report from TRIUMF (Alan Shotter)
 - ii) Theory Proposal (Cliff Burgess)
 - iii) Linear Collider (Dean Karlen)
 - iv) GLUEX Project (George Lolos)
 - 11. AOB
- 2. The minutes of the previous AGM were approved.
- 3. There were no matters arising from the minutes.
- 4. Council Election:

The identity of the email voters was removed from the ballots by C. Picciotto, and the ballots counted by scrutineers W. Trischuk and R. Kowalewski. The results were: Doug Gingrich 26, Akira Konaka 45 (elected), Dugan O'Neil 34 (elected), Ken Ragan 26, Pierre Savard 13. The Director thanked outgoing Council members Richard Hemingway and William Trischuk for their valuable work.

The Director, Richard Keeler, is resigning effective September 1st, and he thanked the IPP Secretary/Treasurer (Charles Picciotto) for his help.

5. Financial Report:

Last of three years of the IPP project grant. 93% of budget supports the eight research scientists, but the IPP also supports conferences and a small amount of travel for the director and members of council.

6. BoT and Proxies Meetings:

New/renewed trustees include Keeler, McDonald, Stairs and Trischuk. Eight new individual members were confirmed and a new institution (University of Regina) was admitted. We have 141 individual and 13 institutional members. A membership drive is likely to increase membership by approximately 20 people and should be undertaken soon.

Policy/Terms & Conditions - The committee still active but no major new initiatives this year.

Peter Krieger promoted to (tenured) continuing research scientist.

7. Director's Report:

Met with council in October in Carleton, Victoria in January and by phone in April (minutes are on the IPP website).

Reviewed the IPP science programme.

Helps the director prepare a report for the GSC in February.

Reviewed new membership applications, tenure/promotion activities.

Produced two IPP newsletters this year.

Suggested members for national and international committees.

International:

Keeler had been ICFA representative from Canada (01-04). Karlen has been nominated to take over from 05-08.

Meeting in August at LP03 and in Paris in February.

Strong statement came from the Paris meeting endorsing the linear collider.

ITRP is deliberating on the most suitable technology for a linear collider.

Also the Linear Collider Steering Group is searching for a lab to host the Global Design Initiative, a design group for the linear collider.

The director has also served on the USLCSG—international partnering subcommittee (www.slac.stanford.edu/~hll/USLCSG/General/Index.html) that has outlined the American model to host a linear collider.

Attended SNO-ARC, ACOT, GSC-19 Project reviews, NSERC Large Project Day, TRIUMF 5yr plan and subsequent reviews. Present TRIUMF funding ends in March 2005 and IPP had significant input into the plan that is now being considered by the NRC. IPP elements include an ATLAS data hub, linear collider machine contributions, long baseline neutrino detector R&D and construction, KOPIO accelerator and detector contribution as well as other smaller initiatives. Conference support includes the Lake Louise Winter Institute, Montreal-Rochester-Syracuse-Toronto (MRST) theory meeting, North American Linear Collider workshop in Victoria and COSMO04 in Toronto.

The IPP Physics Program:

SNO, ATLAS, BaBar, CDF, HERMES, Rare K, ZEUS continue as IPP projects. T2K and VERITAS have received final approval/funding and have formally been accepted as new IPP projects.

Considering GLUEX and KOPIO as potential future projects when funded. In addition R&D in PICASSO, double beta decay/SNOLab and the linear collider could become IPP projects in the future.

Showed the funding that IPP projects and high energy theorists received from NSERC totals about 14.2M\$ this year.

Some details on each of the projects were shown.

Showed a table of recent faculty hires in IPP areas in Canada.

26 new hires, 6 CRCs + 2 searches underway. 5 people have also changed institutes since 2000. Much more dynamic than at any time in the history of the IPP.

Outlook:

Next phase of SNO data coming soon.

Search for new director of the IPP.

New funding for TRIUMF

New NSERC five year plan should be created.

Application for renewed funding for IPP from NSERC.

8. Director Search:

BOT appointed a search committee composed of J-M. Poutissou (Chair), D. Sinclair (to be confirmed), M. Vetterli, an IPP-Scientist nominee, and C. Picciotto (ex-officio). Nominations by July 9 should be sent to Picciotto at pic@uvic.ca. Shortlist by July 20, interviews in early August, recommendation to BOT by August 20.

9. NSERC GSC 19 Report:

11 members of the committee this year (one less theorist). There will be 6 new members next year, 5 the following year and only one the year after that. External reviews of TIGRESS, ATLAS, SNO, Astroparticle projects (4) and TWIST were held during the winter.

Showed the competition budget and compared it to previous two competitions. There were similar amounts of funding available and requests, but many more 'ongoing' experiments. Care was taken to make funds available for allocation in 2005 competition.

Showed some graphs of Low/Intermediate energy, 3 highest projects, traditional HEP projects and future projects. Also broke down the number of theorists and the average amounts they were awarded. Reallocation has certainly helped. Reallocation can sometimes result in a micro-managing of funds. NSERC is reviewing the reallocation process across all GSCs and considering what to do next time. Showed a 5yr rolling plan as an outlook on where the funding envelope is headed.

Some things that are on the horizon for GSC19: SNO decommissioning, SNOLab, T2K detector construction, additional ISAC-II detectors. Applicants are strongly encouraged to explore other sources of fundings (CFI, international partners etc.).

10. i) TRIUMF 5-year Plan (Alan Shotter):

Prepared a 5yr review of TRIUMF activities (1998-2003) and a 5yr plan (2005-2010) and forwarded both of these to NRC last fall. Plan includes establishing ISOL, PET for life sciences, uSR for materials studies, data centre for ATLAS, contributions to rare Kaon and neutrino experiments, engage in linear collider R&D and act as a base for technology transfer to industry.

Presentations were made to ACT in November and NRC council in February but the decision was deferred to the meeting in June. Arthur Carty (the director of NRC) was appointed the Prime Minister's Science Adviser on April 1. Members of the TRIUMF BOM have been active contacting the NRC and Council. BOM meeting in Toronto this week and will discuss the direction of future efforts.

The community is encouraged to engage in the promotion of the plan to the incoming government.

Talked about the TRIUMF bid to host the linear collider design team.

The requirements include office space for 15 staff, 15 visitors, meeting spaces for 100 people, financial/purchasing/computing resources. The salaries for the 30 people will be paid for by their home labs around the world whilst the host provides their infrastructure.

Gave a preview of what the new TRIUMF house will look like, ready for occupancy by the end of the year.

ii) IPP Proposal to Support Theory (Cliff Burgess):

Suggest that IPP apply for new money eventually reaching \$120k from NSERC to provide competitive fellowships to partially support postdocs in the Canadian IPP theory community. This would fund 3, two-year fellowships a year, for a total of 6 beneficiaries at any given time.

Funds are needed because average theory grant is \$40K/yr while North American postdocs (in the US) often get up to \$40kUS plus benefits. This proposal is a way to benefit a wide variety of theorists across the country.

IPP will benefit from this by providing seeds for a vibrant theory community in Canada which is necessary for a viable particle physics programme. Almost no direct funding to theorists presently comes from IPP (except conferences). About half of IPP members are theorists.

Modeled after what CITA and PIMS are already doing. Sponsors make nominations and agree to provide >\$20k of funding that would provide the balance of the salary. Nominations considered by a committee of 4 theorists + the IPP director by January 1st to be competitive with other offers a potential postdoc might receive in the winter/early spring.

Covered a number of potential worries including does this undermine existing funding for theorists from GSC19? Will it undermine support for the IPP scientists?

Plan to put this into the current grant request—with some ramp-up. The proposed level is a compromise to what is needed by the community, what is needed to make the effort of administering it worthwhile, and what is likely to be funded.

The director solicited feedback prior to the preparation of the grant request this fall. This will give theorists who are on 4yr grant added flexibility to hire a postdoc.

IPP is not proposing to re-examine perceived inequities that might emerge from the GSC process.

To avoid a monopoly on these, relatively few, positions, IPP should probably impose some reasonable limit on nominations from successful sponsors.

Could use a different NSERC programme to launch this programme.

Need to consider how to handle candidates with NSERC PDF awards.

Theory could go in this grant with a ramp-up in funding and a flexible start date.

iii) Linear Collider (Dean Karlen):

The physics case has been well documented.

ACFA, ECFA and HEPAP have all endorsed the linear collider as the next large machine. The US DOE Office of Science makes this the highest priority facility among those not already at the proposal stage.

The scope is 500 GeV and 500 fb^-1 in first 4 years; 1 TeV and 1 ab^-1 as an upgrade in a following 4 years.

ITRP has been gathering data for the last 6 months. Over the summer they are supposed to come up with a recommendation.

Global Design Initiative (GDI) task force that will spawn the Central Design Team.

Time scales: 2004 technology decision, 2005 Initial cost estimate, 2007 full technical design, 2008 site selection, 2009 begin construction, 2015 first physics. London meetings have been occurring between funding agency representatives in order to explore ways to jointly fund such a project.

Canadians have been involved in physics discussions (with NSERC IOF support), TPC detector R&D, fast switches over the last 6 years.

TRIUMF will bid to host the Central Design Team. Provides a good geographic compromise. Will also bid to host next international meeting (after Paris). More info at www.linearcollider.ca

iv) Status of GLUEX Project (George Lolos):

More information can be found at www.gluex.org

This project was included in the near term priorities of the DOE Office of Science facilities report. The main goal is to identify and analyze the hybrid meson spectrum and understand the properties and production with a polarised beam. Best physics is expected to come from 12 GeV polarised electrons that produces a 9 GeV polarised photon beam. The detector then must be optimised for partial wave analysis, have large acceptance and able to take high rates. Foresight in building CEBAF left space in the tunnels and as new RF technology becomes available higher gradient and an increased number of RF cavities will allow the machine to rise in energy from 6 GeV to 12 GeV.

GLUEX is a collaboration of Australia, Canada, Mexico, Russia, Scotland, Greece and the US with approximately 100 physicists.

Regina is involved in building the barrel calorimeter. R&D has been underway for some years. Prototypes are being completed in the machine shops at Alberta. There is an active research programme to use silicon PMTs to readout the light in the presence of a strong magnetic field. Programme is complementary to other meson spectroscopy experiments including CLEO-c and experiments in Europe at GSI.

11. There being no other business, the meeting adjourned at 17:30.