Reflections on LCWS19, Sendai

Chris Potter

University of Oregon

Monday: Group Photo

Feedback on Talks

- Correcting for Leakage Energy in the SiD Silicon-Tungsten ECal (Tuesday)
  - Check results with photons, expect some difference from electrons.
  - Try with magnetic field on, fewer electrons at low angle of incidence.
  - Check with multiple electrons per event - does it work with clustering (Andy)?
  - How well is this measured in the HCal? Use both measurements!
  - With the nominal 20+10 ECal, does performance approach the Ideal ECal (Marcel)?
- pySiDR: Python Event Reconstruction for SiD (Thursday)
  - Nobody seemed aware of any previous effort to do reconstruction with Python.
  - Earned a coffee date for implementing Conformal Tracking, didn't follow up.
  - "95% tracking efficiency is easy, it's the last 3% that's difficult" - T. Behnke.
  - One ILD colleague asked if I found debugging Python hard. I said I didn't.
  - Some positive feedback on brevity of code in pySiDR - "I can do this on my laptop!"
- SiD Session (Friday)
  - Present: Jim, Andy, CP, Phil Burrows, Gerald Eigen (apologies Marcel, Hitoshi)
  - Support for maintaining the document "Primer on ILC Physics and SiD Software Tools"

Physics Summary (Ian Low), Slide 8

But first we need to acknowledge the foundations of any measurements

- Detector performance
- Object/event reconstruction
- Event simulations

Between the Talks

- Mikael Berggren (DESY)
  - Talks on “SGV Fast Simulation” and “Generating the Full SM at ILC” (among others).
  - Mentioned running a new production at the request of the LCC (Jim).
  - I indicated that Oregon would like to help since we now have `hepilc` cluster.
  - SGV looks promising, unfortunately no webpage or documentation.
- Michael Peskin (SLAC)
  - Peskin/Iwasaki maintained pandora-pythia, a C++ event generator with ISR/Beamstrahlung for ILC, ca. 2000.
  - I approached Peskin about plans for revival. Initial response: NO! SORRY!
  - Persistence pays off. He will provide ca. 2010 code for pandora, I will interface to Pythia8.
  - He also emphasized the talk from Sherpa for e^+e^-, to include ISR.
- Masako Iwasaki (Osaka, etc.)
  - Part of RCNP/IDP group, “Application of Deep Learning for Accelerator Experiments”.
  - Wants to meet regularly with Oregon group, suggested Tuesday afternoon Pacific time.

Friday: LCC, US HEPAP, US Embassy, Japanese Diet

Counterclockwise, from top left: Jim Brau, JoAnne Hewett, Melinda Pavek, Hon. Shionoya Ryu

Saturday: Typhoon Relief

Keynote Speech (English Translation)
by
SHIONOYA Ryu
Member of the House of Representatives of Japan

Good morning and thank you for the introduction. I am Shionoya Ryu, and I serve as Director-General of the Federation of Diet Members supporting the ILC.

First, I would like to express my heartfelt sympathy to those who were affected by the giant typhoons and my condolences to those who passed away. And, once again, I would like to express my deepest gratitude to those around the world who sent us support after the Great East Japan Earthquake. I hear that some of you attending the LCWS workshop will be headed to the typhoon-affected area to do volunteer work. I am very grateful to all your help.

Typhoon 19 (aka Hagibis) hit Japan October 12/13, and 13 prefectures issued the special storm alert, the most in history. The death toll was 79 on 18 October, with 9 missing, and 45,000 homes were flooded. We went to the town of Marumori, south of Sendai, to help dig mud from houses. These gestures matter.