Plenary session of the ATLAS Trigger & Physics Week at CERN Main Auditorium. *Photo: CERN*

Meetings: You gotta have 'em, love 'em

Really? Really, guys? Did we really have more than five thousand meetings last year?

Some friends and I were discussing the volume of meetings within ATLAS, one of the two big detector experiments at the Large Hadron Collider in Geneva, and I thought I might support this discussion with some statistics.

According to the 13-year summary of ATLAS meetings registered on our main scheduling Web site, we had 5063 meetings in 2007, nearly twice as many as the year before.

But even that number understates the case. What the chart actually shows is the number of "events," and a single event can range from a one-hour meeting to a week-long conference. Trigger and Physics Week, for instance, which involved five full days of meetings, is listed as one event, which makes this figure all the more depressing. Say there are approximately 250 working days at CERN, the European particle physics lab where the LHC will soon start operations; this would work out to approximately 18 meetings per day. It baffles me that we have that much to talk about!

Since I just couldn't resist, I looked at the number of 2007 events for CMS, the other big detector at the Large Hadron Collider. Although ATLAS and CMS each involve roughly the same number of scientists—about 2000 people from around the world—there were 2938 CMS events to ATLAS's 5063.

Hmm.

I think there are two possible explanations here. Maybe CMS uses a different scheduling and conferencing Web site. Or perhaps CMS is more verbally efficient; they say in one word what ATLAS says in two.

It would be interesting to see the monthly statistics, but the Web site doesn't generate those. That's probably for the greater good of the experiment. People can really get into plotting all the various statistics; and knowing ATLAS, we would probably have to schedule a meeting to discuss the results.

If you were to ask me—and I feel I represent the population well on this—"Do you spend too much time in meetings?" I would say, "Yes." But if the next question was, "Which meetings do you think ATLAS could afford to get rid of?" I would say, "None."

Take Trigger and Physics Week. In the talks I attended, the information presented was useful and relevant, meaning that for the most part it was information I needed to continue my own work. I cannot point to a single talk that was not worth hearing. Certainly there was some overlap, but I didn't feel I was being told the same thing twice. So maybe 5063 meetings per year is the reality of doing physics in an experiment with 2000 people.

Here's my meeting schedule for the week of January 15, 2008, which did not include any big, multi-day events. All but one of these meetings is weekly. My meeting load is pretty typical, I think. People have different focuses, but the volume is similar.

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Monday, January 15, 2008

9:00–10:00 a.m. We call this the Tile morning meeting. Everyone at CERN who is working on calibration and commissioning of the tile calorimeter, or TileCal, gathers in the coffee area to discuss activities for the next two days. TileCal is an ATLAS sub-detector that measures the energies of particle jets coming from the collision point. This is a very nuts-and-bolts meeting—where the detector will have power for the day, who is doing what tests and when, things of this nature.

5:30–6:30 p.m. The University of Chicago group meeting. Every week we have a phone meeting between the seven Chicago people located at CERN and about 15 back home in Chicago. People give informal presentations about their work. It helps the group stay connected and gives us constructive suggestions in a relaxed environment.

Tuesday, January 16

10:00–11:00 a.m. Counting room management meeting. The "counting room" is a series of underground rooms near TileCal that contain most of the electronics and services for the sub-detector, such as the low-voltage power lines. This meeting discusses system-wide problems that might affect the sub-detectors, from power cuts to disruptions in the computer networks. Usually one person from each sub-detector attends this meeting and passes the information on to their group.

5:00–6:00 p.m. Fast Tracker weekly meeting. The Fast Tracker is a hardware upgrade being proposed for the ATLAS trigger system, which sifts through the enormous amount of data coming out of particle collisions and decides which events are interesting enough to examine further. The goal of the upgrade is to quickly search for particle tracks in the innermost ATLAS sub-detectors. The tracks can be used to select events that produce *b* quarks, for example, which are of great physics interest. This group is doing research and development for the proposal; in our weekly meeting we discuss any results and the progress we have made.

Wednesday, January 17

9:00–10:00 a.m. Another Tile morning meeting, going over plans for Wednesday and Thursday.

10:00–11:00 a.m. Phase 2 commissioning meeting: This is an ATLAS-wide meeting to discuss the integration of each sub-detector into ATLAS as a whole. During commissioning—the process of getting ready to take meaningful data—each sub-detector is basically autonomous. But as we move closer to the day when the Large Hadron Collider starts running, we have to get all the sub-systems operating together. We work toward this by running multiple sub-systems at a time. In this meeting we discuss the planning and coordination of these combined runs, and tally up the things still to be done before the commissioning phase is over.

1:00–2:30 p.m. CERN supersymmetry meeting. We discuss how we are going to search for supersymmetry—a theoretical phenomenon in which each known particle would have a heavier partner—with ATLAS. We spend a lot of time talking about how we can realistically measure the background "noise" of particles coming out of collisions and how to measure uncertainties, so we could recognize any evidence of supersymmetry that might pop up.

Thursday, January 18

9:30 a.m.–12:30 p.m. Level-one calorimeter trigger meeting. We discuss the commissioning of the level-one calorimeter trigger, another system for sifting data to find interesting collisions. It is a monthly meeting, so it is longer. The level-one calorimeter trigger receives signals from TileCal, so I work with the level-one people on jointly commissioning and calibrating the combined TileCal/level-one system. This meeting is good for me; I can connect with some of my level-one colleagues, whom I might not interact with on a daily basis, and see their recent work.

4:00–6:00 p.m. TileCal weekly commissioning meeting: We talk about calibration results, how the commissioning is going and the things we still need to do before the beam turns on. About 50 people spend a large fraction of their time commissioning TileCal. Among other things, this meeting allows me to see what others are doing.

Friday, January 19

9:00–10:00 a.m. Yet another Tile morning meeting, going over plans for Friday and the weekend.