

Director's Corner

2 July 2009



Barry Barish

"A picture is worth a thousand words"

– (sometimes attributed to) *Napoléon Bonaparte*

Today, in less than 1000 words, I announce the addition of a new member of the Global Design Effort Executive Committee (EC), Jean-Pierre Delahaye of CERN. Jean-Pierre will allow us to form stronger ties with CERN, as well as a direct connection with the Compact Linear Collider Study (CLIC) initiative. CLIC is an alternative approach towards a linear collider that could potentially achieve higher energies, but on a longer time scale. Delahaye is a prominent accelerator scientist, who has been an active member of the GDE since the development of the *Reference Design Report* (RDR) and he has served as Deputy European Regional Director to Brian Foster.

Jean-Pierre Delahaye received his Doctor-Engineer (distinction: "*très honorable*") in the Laboratory of Accelerators at the Centre for Nuclear Studies in Grenoble (CENG now known as CEA Grenoble), France, submitting a thesis entitled, "*Study and Realisation of an Emittance Meter adapted to a High-Frequency Ion Source*". He came to CERN in 1974 and has broadly participated in the accelerator programme at CERN since then, including acting as Booster supervisor and engineer in charge of the Proton Synchrotron (PS), serving as project leader for the design, fabrication, installation, tests and commissioning of the Electron-Positron Accumulator (EPA) of the LEP Pre-Injector (LPI) as Lepton Production (LP) Group Leader, responsible for the LEP Injector Linac. Since 1994, he has served as a leader in the Compact Linear Collider (CLIC) R&D and study efforts.



Jean-Pierre
Delahaye



CLIC CTF3 Test Area

Jean-Pierre's work at CERN is centered on the 3rd-generation CLIC Test Facility (CTF3) and the creation of a conceptual design for a linear accelerator based on this concept. The GDE EC was given a tour of this impressive test facility during our joint meeting last month with the CLIC Extended Steering Committee and CERN management. The primary goal of CTF3 is to demonstrate the CLIC radiofrequency power source scheme, drive beam generation, 12-GHz extraction and the acceleration of the test beam. The results of these tests, combined with the accelerator design effort underway, will be the basis of a CLIC conceptual design report which is scheduled to be done by the end of 2010. These milestones will be very important inputs to the CERN management and physics community to evaluate the next steps in the CLIC

development programme.

We have been renewing our efforts to strengthen connections with CERN as we move towards an ILC technical design and a possible construction project. CERN is the central laboratory for the high-energy physics programme and we fully expect it will be an important player in any future linear collider, whatever the final design and wherever it is built.

CERN has already contributed in important ways to



The recent meeting of the GDE EC, CLIC leadership and CERN management

our efforts during the ILC RDR phase. We adopted several of their project tools, including our document and meeting agenda systems, we received important advice regarding installation of very large detectors deep underground (based on experience with the Compact Muon Solenoid detector at the Large Hadron Collider), and we had direct contributions from CERN scientists, especially in the area of conventional facilities. Instituting joint ILC/CLIC working groups over the past year has strengthened our CERN/CLIC connections, as well as profiting both groups by sharing resources on mutual problems. Jean-Pierre Delahaye becoming a member of our executive committee is another step that will further bring our efforts together.

We welcome Jean-Pierre to our executive committee and I look forward to working more closely with him. It is interesting to note that the lyrical name, Jean-Pierre Delahaye, does not originate with our present-day colleague and new EC member. In fact, the name is associated with the author of my title quote, Napoléon Bonaparte. You might recall the famous Hundred Days when Napoleon escaped from captivity on the island of Elba, marched into Paris and briefly returned to power. Only five days afterwards, Napoléon appointed Jacques-Louis David, the most famous painter in France at that time, as the official painter. Unfortunately for David, Napoléon was soon defeated at Waterloo. However, during his brief period as the official painter, David painted a well-known portrait of Jean-Pierre Delahaye, which ended up being his last artwork in France. David spent the remainder of his life in exile, first in Switzerland, then in Brussels.

What might we infer from this famous painting regarding our Jean-Pierre and his new role as a member of the GDE EC? I mentioned above that he will bring awareness of CERN and CLIC issues into our discussions but, in addition, he will have certain duties as a member of the EC. In order that our readers gain familiarity with the broader senior leadership of the GDE, I began the tradition of soliciting a guest Director's Corner by one of our EC members for the last Thursday of every month. If a picture is worth a thousand words, and considering the famous painting of Jean-Pierre Delahaye (the elder), I think we will now all look forward to Jean-Pierre's first *ILC NewsLine* column, in a 1000 words or less!

-- Barry Barish



Portrait of lawyer Jean-Pierre Delahaye by Jacques-Louis David in 1815 (any resemblance?)