

A curriculum vitae may be found at: http://rolandi.web.cern.ch/rolandi/Gigi_Rolandi_CV.PDF . Here I summarize the aspects of my curriculum that I believe are germane to the position of spokesperson of CMS.

Contributions to CMS. I played a central role in changing the tracker design from a hybrid of silicon and micropattern gas detectors to the present “All Silicon Tracker”. I was able to keep the tracker collaboration united on the new project, which I steered for four years. As project manager (00-05) I reshaped the project for the challenge of construction, set up the production centers for the modules and defined the main procurements. As chair of the Publication Committee (06-09) I defined (together with Paris Sphicas) the approval process for physics papers. I designed the Analysis Data Base and its interface CADI for the management of CMS analyses and the CDS approval system for the CWR. I published, the 23 CRAFT papers in a two-month period just before the start of LHC collisions. As CMS physics coordinator (10-present) together with my deputies I proposed the physics plans and priorities for the 2010 and 2011 runs and coordinated the physics production of CMS during the last 14 months. During this period CMS has produced a large number of high quality analyses and papers, more than all the other LHC experiments combined, with many more to come.

Management style. The success of CMS depends on all of us. Consultation, delegation, empowerment, trust, decisiveness, inclusiveness and engagement mark my management style. As Physics Coordinator I consult widely one-on-one seeking advice and input and by default we discuss programs, e.g. the CMS Physics Plans, openly in the Collaboration. Delegation is critical: in the tracker project I created the Tracker Steering Committee; as Physics Coordinator I instituted the Physics Office. Empowerment is critical: the 32 CMS conveners are empowered; they are not micromanaged, rather I trust them giving full support to their decisions. I make decisions after extensive discussion (e.g. I discussed the nomination of the physics conveners with the Search Group with multiple candidates for each position and all nominations were disclosed to the CB for the first time). I am able to take difficult decisions and to stand up and explain them. When selecting people for key roles (e.g. physics conveners) my first priority is excellence but I also strive for gender and nationality balance. I am committed to engagement, for example by seeking nominations for ARC membership. To date more than 400 CMS members have served on at least one ARC. I constantly examine procedures and look to improve them. For example there is a need for further parallelization and streamlining of the review process to improve throughput without sacrificing quality. We can bring many more of the talented and experienced members of the collaboration into the process to improve its efficiency. I am consulting widely on ways to do this and changes will be implemented soon.

Extensive experience in Scientific Management: I spent 10 of the last 20 years very successfully managing large scientific communities with direct responsibility for executive decisions: I was spokesperson of ALEPH¹ when the center-of-mass energy was increased above the Z peak (94-97), I was the project manager of the all-silicon tracker of CMS (00-05), and I have served as CMS physics coordinator since January 2010. I talk effectively to review bodies and funding agencies: I have been a member of many important review bodies and an advisor of funding agencies (INFN, SLAC, DESY, UK-PPARC, CERN-LEPC, CERN-LHCC, Portugal, Norway, and Austria). I served for four years as chair of the DESY

¹ ALEPH was one of the four LEP Collaborations with some 400 Members running an experiment at the LEP e+e-collider from 1989 to 2000.

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Physics Research Committee (I was the first PRC chair not in the DESY directorate. My predecessor was A. Wagner in his capacity as scientific director of DESY and my successor was Y.K.Kim Deputy Director of Fermilab).

Extensive physics analysis experience: I am editor of two leading HEP journals: Physics Letters B and Journal of High Energy Physics (JHEP). I am the “Scientific Adviser for Experimental Physics” of JHEP. I was Physics Coordinator of ALEPH at the startup of LEP. ALEPH arrived well-prepared for first collisions publishing – along with other papers - the first LEP limit on the Higgs Boson mass and the – at the time – most precise measurement of the number of neutrino species. Today I serve as the Physics Coordinator of CMS and most of you know me in this capacity.

Extensive instrumentation experience: The design of the ALEPH TPC (and all subsequent TPCs) was based on my recognition (together with F. Ragusa) of the importance of the magnetic field as stabilizer of the electron drift path. I am a co-author of a well-known book on drift chambers². I was a co-author of the “Wire Chambers” review of the PDG for the four editions between 2000 and 2006. I chaired the LEP Energy Working Group that provided the first calibration of the energy of the LEP beams at the 1 MeV level. As ALEPH spokesperson I steered the ALEPH upgrade with the installation of the new mini-vertex detector for the high energy run. As CMS Tracker project Manager I played a key role in changing the tracker design to the present “All Silicon Tracker” and putting in place the facilities for building and testing 16,000 silicon modules at more than 20 sites world-wide. I have deep knowledge of the CMS tracker.

Extensive experience of the host laboratory: I have been a member of the CERN senior research staff since 1991. Consequently I have easy and direct access to all staff and structures of the Laboratory. I enjoy excellent professional and personal relations with the CERN directorate: Rolf Heuer and I were spokespersons of OPAL and ALEPH at the same time, Sergio Bertolucci and I have grown up together, scientifically speaking, at INFN. Steve Meyer was in charge of the LEP program while I was LEP physics coordinator (and we spent many days together in the LEP control room). Since 2008 I teach at Scuola Normale Superiore in Pisa in the framework of an agreement between CERN and Scuola Normale. If elected I will discontinue teaching to devote 100% of my time to CMS.

² <http://www.springerlink.com/content/978-3-540-76683-4/#section=148164&page=1>
2 Editions 93 and 2008