

Statement on the Election of the Collaboration Board Chair for the term of 2013-2014

Thomas Muller, KIT

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CMS and more generally the LHC project are on the verge of making a historic leap in science and culture. The LHC project has generated unprecedented public support and interest. It is therefore vital to our field that we as a community in the broad sense and more specifically as a collaboration, achieve this great goal successfully. In the first major data taking run at the LHC, CMS has proven to be a wonderful instrument, redoing and extending particle physics of the last seven decades within a mere 18 months. We have surpassed the performance of the Tevatron in high pt physics and in search sensitivities for physics beyond the SM. Last not least, we are seeing first evidence for a SM Higgs boson which most likely will be discovered this year. All this has been achieved owing to the enormous motivation of the collaboration and a very capable management.

During the term of the next CB Chair (2013 and 2014), the CMS collaboration faces four challenges:

- Analysis of the full data set from the two major runs
- Maintenance work on the detector
- Preparation for the forthcoming high energy runs
- Launching of phase I upgrade construction

We are well experienced carrying out any of these projects individually, but now we have to organise ourselves to bring all four to success simultaneously. Clearly our management under the leadership of our spokespersons will have to coordinate the efforts, carefully balancing the joy and reward from physics analyses with the chores, acquiring a lot of resources in manpower and finances. This will only work if all members of the collaboration regard themselves as part of CMS in all four aspects and if the institutes are capable of carrying out their tasks. Only if there is a good understanding that the effort and contributions of an institute and its members to CMS are recognised and of mutual benefit, we can expect the needed motivation to carry out the tasks mentioned above. Here the Chair of the Collaboration Board will play an important role.

The tasks of the CB Chair are described in our constitution. I would set priorities as follows:

- Responsibility for the members of the collaboration and their needs

Much attention will be needed to encourage and to enable the participation of all members of the collaboration. While the proper performance of CMS and the best exploitation of the physics potential are of foremost importance, the need of the individual collaborators have to be catered for: most PhD students need to write their theses on physics topics and be associated with publications, post-docs need a long term perspective, and professors need to balance successfully the requirement for good teaching, excellent research and the acquisition of funding. There are various examples where we still can do better to support these groups:

Like in other experiments, in CMS publication of independent high quality analyses of given channels should be promoted. This may not be easy because we need more ARCs, but this will foster diversity and creativity. More reflection should be going into helping promising postdocs with their careers. Students and postdocs should be encouraged to exchange their concerns and bring them to the CB. To this end, I propose that at each CB meeting, a representative of graduate students and of postdocs gives a short presentation including possible concerns and suggestions. We could also create the item "Result of the Week" and have them presented during CMS weeks.

- Representation of the institutes in the CMS management, defending if necessary their interests

The CB is the decision-making body of CMS. All major decisions proposed by the management need to be taken by the CB. The CB Chair needs to have a sense in which cases first a discussion with the CB is needed. The institutes, mostly university groups, have constraints in the way they are able to contribute their MOA tasks and to carry out research. They have to ensure successful completion of theses, need to acquire funding and adhere to schedules dictated by the universities. Primarily the CB chair has the task to take these things into consideration when management decisions are being taken.

- Participating in reforming the management and in recruiting new members of the management

Each term, adjustments to the way CMS is operated are being taken and new people are acquired for the management. With the help of search committees, we aim to identify the best available persons for the managerial tasks. Special care shall be taken that each capable and committed person has equal chance, irrespective of affiliation or other attributes, to join the management. Meritocracy will play an important role when being chosen for such a position.

- Supporting CMS in its dealing with funding agencies and with CERN management

The CB Chair should be included in dealings with CERN and with major funding agencies. In my case, my experience with funding agencies in the USA, in Germany and at CERN and my close connections to the CERN directorate may come in helpful.

Summary and personal statement

I am grateful for being nominated for the position of CB Chair. If elected, I will bring in my long experience in research at hadron colliders, in administration and in dealing with people and I will carry out the tasks of CB Chair to the best benefit for the CMS collaboration. The proximity of my institution to CERN (four hours by car, five by train) will allow me to be at CERN on a weekly base. My credentials may be found at <http://www-ekp.physik.uni-karlsruhe.de/~mullerth/CV-MULLER12.pdf>

A handwritten signature in blue ink, appearing to be 'Th. Müller', written in a cursive style.