

## Candidate statement for CMS Collaboration Board Chair Election

Jordan Nash – January 2012

Dear Colleagues,

It is an honour to be considered as a candidate to chair the CMS Collaboration Board. It has been a great pleasure for me to take part in this experiment over the last decade or so, watching it go from a collection of prototypes to one of the most impressive scientific achievements on the planet.

This experiment has already demonstrated that it will last through more than one generation of participants. The CB has an important role to play in ensuring that we get the best possible return out of our apparatus, and that we evolve our detector, and our collaboration structures to keep extracting and publishing the best possible physics.

Our experiment is running well, and the CB and its advisory structures are well established. There are a few areas where I feel we will need some debate to make sure we continue to adapt to the machine and detector performance, the physics we discover, and the continuing evolution of our membership.

**Monitoring the responsibilities, and distributing the rewards fairly:** Working closely with the CMS management, the CB must make sure that each institute is able to fairly participate in the operation of the experiment, as well as give the next generations of physicists opportunity and visibility for the work they have done. This includes promoting a culture of cooperative collaboration on physics analysis, which is seen to fairly reward all contributors. The CB is the body where each institute can voice its concerns as to how well this is functioning, and work to make sure each of us feels there is a fair allocation of service and rewards *e.g.* talks. As CMS ages (both the detector and some of the workforce), we must monitor that we continue to support the operation of the detector while placing an appropriate burden on CMS members.

**Preparing the detector for the future:** It is clear that we will have to adapt our detector to handle an increasing integrated and peak luminosity over the next decades. This may require fundamental changes in some major parts of CMS, and it is vital that the institutes can participate in these major decisions and in the consequent construction activities. I believe the CB has a role to play in making sure the collaboration is well informed about the issues which will need to be decided, and ultimately, the CB must endorse the future shape of CMS. As Upgrade Project Manager I have had the opportunity to consider the long term needs that the experiment requires to cope with the future challenges of detector aging and increasing luminosity, and can use this experience to strengthen the interaction between the CB and the Management on taking these decisions.

**Adapting the structures of CMS:** I fully support the discussion that is currently underway to review the CMS structures and management. I believe it is healthy to have a periodic review of the organization, and to understand how we maintain our collective expertise whilst bringing in and training the next generation of leaders. Arriving at a consensus as to how to react to the current review will require some time as will implementing any necessary changes.

I have had experience with CMS as the ECAL and the CMS Electronics Coordinator of bringing diverse groups together to find and implement common technical solutions under the pressure of having to complete the detector. I have also had the opportunity to chair UK funding agency committees during difficult times. In such situations it is vital to reach a consensus with some fairly diverse constituencies. I have found that building such a consensus requires; A thorough and effective discussion of the issues where each member feels they have the opportunity to participate and have their point heard and understood, and a clear summary of the arguments for (and against) the decision that each member can appreciate and accept as fair. In a body as large as the CMS CB, achieving these two points can be a challenge. I think we need to adapt the debate in the CB to allow some additional discussion of important points outside of the meetings. While there is no substitute for debate “in the chamber,” we can all appreciate that today’s technology offers more opportunities for focussed discussion to take place in advance of the meetings. These discussions can be restricted to CB members, and/or open to the collaboration as appropriate. I would hope that we could use these advanced discussions to clear any misunderstandings, and frame the important points that we need to air out during our face-to-face meetings.

I believe that my experience in the CMS management, outside of CMS interacting with funding agencies, my time as a CERN staff member, as well as my career as a university faculty member gives me a good appreciation of the issues facing the CB and I would be delighted to have the opportunity to put my experience to use serving CMS as chair of the CB, and working together with the management to keep the members of CMS productive, happy physicists.

