

ECFA Recognition Working Group

Recognition of individuals in large collaborations (CMS)

General

1. Do you recognize the issue in your collaboration?
 - a. Yes. We are particularly concerned about recognition of those who work on technical aspects of the experiment, such as building software, characterizing physics objects, detector work, etc., without which no papers on “physics” would be possible. The concern is that work of a technical nature is not as valued as work perceived as closer to the physics. The mere fact that we call such work “service work” says it all.
2. Does your collaboration consider it an important/urgent topic?
 - a. Yes. This is a topic under discussion within the collaboration. Some actions have been taken (see below), but much more is needed.
3. Do you already have a forum to discuss this?
 - a. No specific forum. However, this issue is discussed by the CMS Career Committee, Young Scientist Committee, and from time to time by the CMS Collaboration Board.
4. Can you provide feedback on “best practices” that you already have implemented?
 - a. It is difficult to know whether what we are doing constitutes “best practice” without detailed longitudinal studies.
 - b. Here are examples of what may, or may not, turn out to be examples of “best practice”:
 - i. Creation of a Career Committee to advise young people on all aspects of career planning.
 - ii. Creation of a Diversity Office to advise the collaboration on diversity issues and to monitor its adherence to the CMS code of conduct.
 - iii. Creation of a Young Scientist Committee run by young scientists who, amongst other things, bring matters of relevance to young scientists to the attention of the CMS upper leadership.
 - iv. CMS Weekly General Meeting now includes presentations from much broader range of colleagues, especially younger colleagues.
 - v. Anyone within CMS can nominate someone for a talk. Self-nominations are also accepted. We encourage the Conference Committee to favor colleagues who have made important contributions to so-called “service work”.
 - vi. We established the CMS Achievement Award and CMS Detector Award to recognize outstanding contributions. However, we have recently merged these two awards into a single CMS Award for Outstanding Contributions because of the concern that the CMS Detector Award was perceived as a second-tier award.
 - vii. Formal training for conveners at Level 2 and 3. (The Spokesperson and CB Chair can be regarded as Level 0, while Level 1 are the “coordinators” of broad areas, such as “CMS Physics Coordination”.)

Specific Feedback 1

1. What does your collaboration think about the conclusions of the ECFA report?
 - a. The report was read by CMS leaders and the main results were presented to the collaboration. The conclusions were concerning though not surprising to many. While no specific action was triggered by this report, the report did inform the collaboration's discussions about limited authorship papers and how talks should be allocated.
2. Were some important issues perhaps not addressed?
 - a. It would have been useful to survey attitudes about appointment procedures within collaborations. Are they perceived as fair and transparent or biased towards the vocal or the well-known?
3. Which system do you use for authorlists (alphabetical, opt-in, opt-out, other)? Is it generally appreciated?
 - a. Our author lists are alphabetical. CMS has a default list determined in a well-defined manner, but we have both opt-in and opt-out provisions.
4. Which system do you use for assigning conference talks? How are talks prepared within the collaboration? Do people feel there is enough freedom to determine the contents of their talk?
 - a. CMS members can recommend someone, including self, for a specific talk or without specifying a talk. Statement of a brief justification is strongly encouraged.
 - b. The CMS Conference Committee is responsible for choosing speakers amongst those recommended based on their technical expertise, need for exposure, past talks, and service contributions.
 - c. Abstracts must be approved by the relevant physics or sub-detector convener. Speakers work closely with the relevant experts within CMS to construct the talk. Within the constraint that speakers may show only approved plots and results, speakers have some flexibility in constructing talks; but ultimately the talk must be approved by an expert.
5. What do you think of making analysis notes (limited authorlist of analysis proponents) public? What are reasons pro and con to do that? Would you object to a system where statistics can be collected for the proponents of such ana-notes? Would it be useful to introduce a JENAS wide system?
 - a. CMS has not had a serious discussion about whether internal notes (not just analysis notes) should be public. But the current consensus is that they should not be made public.
 - i. Pro: This would be a mechanism to highlight the contributions of smaller groups of scientists. It would also provide those outside the collaboration detail that may never see the light of day. It may also encourage the writing of better, more complete, internal notes.
 - ii. Con: Our ideas could help the competition scoop us. Our mistakes would be out in the open. Many CMS members do not write analysis notes because they are busy running the experiment, writing software, deriving scale factors, efficiencies, fixing hardware, etc. Therefore, making what were once internal notes public would be yet another source of

- competition and another way to distort the perception of professional competence.
- b. There would be no objection to collecting relevant data so long as the collaboration has the final say about what data are to be collected.
 - c. It not clear, without conducting a pilot project and getting real-world experience, whether a JENAS wide system would be helpful.
6. What is your opinion of prizes and awards? Do you differentiate between awards (a prize for “the best”) and “rewards” (a prize for “an achievement” – no selection).
- a. All our awards entail selection: CMS Award for Outstanding Contributions, CMS Thesis Awards, CMS Young Scientist Prize, etc. These are important ways to recognize the best. However, it is obviously vital that a rigorous procedure be in place to minimize bias. CMS believes it has reasonable procedures. We are particularly pleased with the rigor of our Thesis Award procedure.

Specific Feedback 2

1. One way to recognize achievement is appointing people to responsible positions (board member, conveners, reviewer etc.). How does that work in practice in your collaboration? Does it have a political aspect e.g. equal share between countries?
 - a. The CMS appointment procedures were created two decades ago. There is a strong sentiment within the collaboration that the procedures need to evolve to reflect contemporary norms.
 - b. To that end, the CMS Collaboration Board Chair recently created the CMS Task Force on Diversity and Inclusion, which is charged with engaging in an in-depth review of the CMS appointment procedures and recommending reforms.
2. Analysis reviews are sometimes lengthy procedures that take longer than the job contract of individuals doing the analysis, such that papers are not ready to be published or that results unblinded before graduation or end of contract. Is this an issue? If so, is there a mechanism to deal with that?
 - a. Yes, this is an issue. There are countries in which students are required to have a paper accepted for publication in order to obtain a Ph.D. CMS does not have a formal procedure to deal with this. But CMS tries hard to accommodate this requirement on a case by case basis.
3. Do you have specific policies or practices to promote the work of juniors?
 - a. The CMS Weekly General Meeting is the forum in which the collaboration is informed of the status of the experiment by the Spokesperson. However, starting with the previous Spokesperson, it has become a forum where a junior scientist can present her or his work to the full collaboration. We specifically promote the presentation of work of a technical nature, in part to encourage the view that such work is highly regarded and as vital as the final physics it undergirds.
 - b. The CMS Career Committee – The committee is charged with advising junior scientists on career development.
 - c. The CMS Young Scientists’ Committee (YSC) – This is a forum run by young scientists, which, amongst other things, provides feedback to the upper leadership of CMS. In recent years (though this has been disrupted by the COVID crisis) we introduced breakfast meetings between the upper leadership and members of the

YSC. This has not always been as fruitful as we would have liked, but it is one way that we get feedback from our young colleagues.

4. Do you have something in place for recognition for technical issues?
 - a. Some years ago, we introduced the CMS Detector Award to recognize outstanding contributions to detector work. However, recently this award and the CMS Achievement Award have been subsumed into a single award. This was done in order to eliminate the perceived hierarchy between the two awards.
5. What do you put in place to help the recognition of individuals by members external of the collaboration (for instance for their career advancement). Is there a way for external referee to assess what a convenership entails?
 - a. The CMS Career Committee provides information that external persons can use. It also provides guidance to writers of letters of recommendation about how such letters should be written.
 - b. CMS encourages its members to provide information about themselves in a publicly accessible database.
6. Are specific measures in place to include individual's opinion in decision making processes?
 - a. Not specifically. However, a working group of the recently created Task Force on Diversity and Inclusion will examine this issue.