

# CBM Publication Policy

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# 1 Preamble

Publications are important indicators for the performance spectrum of a scientific collaboration. An internal review is of utmost importance to ensure the quality and compliance with scientific standards of the publication. The aim of this document is to regulate the corresponding procedures for publications done on behalf of the CBM collaboration. Herewith, the term publication includes regular publications in peer-reviewed journals as well as abstracts, conference presentations, posters, conference proceedings (reviewed and non-reviewed), public technical, simulation or analysis notes. The procedures include both the flow of the internal review process as well as the appointment of the committees or bodies that control the process.

The document further regulates:

- the rules of authorship, acknowledgments and recognition of contributions individuals for the different types of publications.
- the guidelines for the definition and usage of CBM figures, i.e., simulation, performance, preliminary, technical, final physics figures.
- documentation and book-keeping

## 2 Physics Papers Publications

Physics Papers are intended for publication in peer-reviewed journals. The following bodies and individuals are involved in the preparation of each such publication according to the rules outlined further below:

- the Physics Working Groups (PWGs); Typically, individual members of groups perform physics analyses which are regularly discussed and presented within the working groups.
- the Editorial/Conference Board (EB, COB)<sup>1</sup>; The EB oversees the formal steps of the procedure to attain an internally approved physics paper draft for submission to a peer-review journal.
- the Paper Review Committee (PRC); The PRC scrutinizes the details of the draft in exchange with the analysis group and the authors;
- the Institute Review. The selected institutes are specifically requested by the EB to comment in detail during the Collaboration review period;
- the Collaboration Review is open to all member of the CBM collaboration. For this process, a suitable forum is made available by the EB on the CBM website.

### 2.1 Initial Draft of a Physics Paper

The very first draft of a physics paper emerges from and within the PWGs. When a certain maturity of the analysis is reached, the PWG conveners initiates the publication process.

A prerequisite for the dissemination of an initial physics paper draft is the availability of an Analysis Note. This note must contain all necessary information for the collaboration to judge

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<sup>1</sup>Currently, the CBM Collaboration Rules provide a combined Editorial and Conferences Board. This will change in further editions.

on the correctness of the physics results to be published, including the main analysis steps, the applied corrections, the systematic error determination and the applied software and simulation environment. The fulfillment of the above mentioned criteria of the analysis note must be verified and approved by the PWG-Convenor. For this process he/she can call in experts from the PWGs.

Upon the availability of an initial draft of a physics paper a PRC is established. The number of members of the PRC should be at least three but not more than seven to allow an effective review. The members as well as a chair of the PRC are appointed by the Editorial Board on proposal of the Physics Board, in close consultation with the Spokesperson (SP). The SP will serve as the arbiter in cases of discordance. It is understood that the members of the PRC are not directly involved in the writing and the preparation of the paper.

## 2.2 Approval of a Second Draft

The PRC is entitled to approve and to internally release a second version of the paper. The second draft should only be released after all issues raised by the PRC are clarified with the respective PWG, the authors of the initial draft and the analysis group. For this process no time limit or deadline is foreseen, however, the chair of the PRC should notify the EB frequently on the status basis. The EB together with the SP oversee the process regularly and resolve conflicts.

## 2.3 Institute Review and Final Draft

When the second draft is approved, it is made available to the whole collaboration. Each member of the collaboration is entitled to comment on the draft. The comments are visible to all members of the collaboration in the corresponding forum on the CBM website.

In parallel, the EB charges several CBM institutes for an Institute Review. The selected institutes communicate their comments to the PRC within due time, typically 3 weeks.

The PRC reviews and implements the comments of the collaboration as appropriate. In consultation with the EB, the PRC may also request further or improved analyses. The approval processes must be transparent and documented. Comments and related responses, e.g., by the referee(s) must be accessible to the collaboration on an internal web page.

A final decision that a paper is ready for submission is made by the EB in consensus. The manuscript should then be submitted to the arXiv in parallel.

# 3 Papers on R&D Results and Instrumentation

The purpose of a CBM Technical Publication is to communicate technical information about the CBM detector and its performance, including both hardware and software, to the scientific community. The authorship of these papers shall be defined by the appropriate Project leader(s).

The Project leader(s) circulate the draft among all members of the project for comments and informs the EB about the draft. In the case of a regular publication which has all members of CBM as authors the paper must undergo the review process as outlined in Sect. 2. For papers published as proceedings the rules of Sect. 4 apply if all members of CBM are authors.

In all other cases the procedure is as follows:

- the EB chair decides case-by-case whether the manuscript can be submitted as individual or

group contribution without requiring approval by the CBM collaboration or must undergo an approval procedure;

- the EB chair may delegate the review to two other CBM collaborators;
- upon approval by the EB, the authors submit the draft to the respective journal and may post it on the arXiv.

## 4 Abstracts, Preliminary Results & Conference Proceedings

### 4.1 Abstracts

Abstracts for conferences, where a presentation (talk or poster) is given on behalf of CBM have to be approved by the Conference Board (COB). To determine whether a contribution is on behalf of CBM the following criteria are of relevance:

- presentation of CBM results at major seminars or conferences;
- significant use of CBM figures (simulations & performance, preliminary or published);
- discussion of general technical issues of the CBM experiment (as opposed to technical issues or R&D results of individual detector components);

Abstracts, which will be submitted on behalf of CBM have to be made available to the collaboration before submission. The detailed submission and approval procedure for abstracts is outlined elsewhere:

<https://cbm-wiki.gsi.de/foswiki/bin/view/PWG/ConferenceMaterialReview>

### 4.2 Preliminary Results and Conference Proceedings

To show preliminary results outside of the collaboration, e.g., in seminars or talks at major conferences the following steps have to be taken:

- an Analysis Note describing the details of the analysis must be available and has been circulated with the collaboration;
- the results have been presented beforehand in the collaboration, e.g., in open meetings or rehearsals.

In case of peer-reviewed proceedings of major conferences, which contain physics results, the COB Chair might decide to follow the rules for regular publication as outlined in Sect. 2. Otherwise written conference proceedings run through an abbreviated approval procedure as compared to regular physics papers:

- the draft is distributed by the presenter, after approval by his/her team leader, for discussion within the appropriate Physics Working Group at least 3 weeks prior to the corresponding deadline;
- after discussion, the proceedings draft is sent to the Conference Board (COB) for review and approval. Submission of the proceedings to the COB must occur at least 2 weeks prior to the conference deadline.

- the COB chair may delegate the review of proceedings to two other CBM collaborators.
- upon approval by the COB, the presenter submits the proceedings to the conference and may post it on the arXiv.
- in case of peer reviewed proceedings the submitter should notify the collaboration about any comments or changed requested by the journal review.
- if the review procedure above is not followed and the content is submitted without informing the COB, the Conference Board is eligible to contact the conference organizers and ask them to withdraw the conference material and remove the corresponding online content.

The detailed approval procedure for proceedings is outlined elsewhere:

<https://cbm-wiki.gsi.de/foswiki/bin/view/PWG/ConferenceMaterialReview>

## 5 Public Notes

Public Notes are publications which supplement physics and instrumentation papers in the form of Analysis & Simulation Notes or as Technical Notes. They may document progress of the collaboration in the form of Progress Reports.

### 5.1 Analysis & Simulation Notes

Analysis Notes contain all information needed for the reproduction of the analysis. They are intended to communicate information to the collaboration and document it for future reference. Analysis Notes are compiled by the individuals or subgroups responsible for a particular analysis of CBM data and are approved by the appropriate PWG convener(s). Analysis Notes are not publicly available and may not be distributed outside the Collaboration. They are accessible to all members of the Collaboration on the CBM web site.

### 5.2 Technical Notes

Technical Note contains technical information about the CBM detector and its performances, including both hardware and software. Technical Notes are compiled by the individuals or subgroups responsible for a certain detector hardware, simulation, calibration or similar. Technical Notes are approved by the appropriate Project Leader. they are not publicly available and may not be distributed outside the Collaboration. They are accessible to all members of the Collaboration on the CBM web site.

## 6 Authorship

The CBM Editorial Board shall be responsible for establishing and maintaining the CBM author list is usually identical with the collaboration list. Authors can be removed from the list either at their own request by request of collaboration members. In the latter case the removal has to be approved by the EB and the SP in consultation with the corresponding team leader.

The CBM Editorial Board shall update the author list at least once per year, by soliciting an author list from each institution via its Collaboration Board representative. A record shall be

kept of the author list as a function of time and published on the corresponding CBM website: <https://www.cbm.gsi.de/>. By default, the authors of papers in refereed journals shall be the members of the author list at the time that the relevant data were obtained. This list can be supplemented (after approval by the SP) by one or more of the following:

- current or former members of the Collaboration who have participated substantially in the preparation and/or analysis of the relevant data;
- current or former members of the Collaboration who have participated substantially in building relevant detector components ;
- current or former members of the Collaboration who have significantly contributed to CBM in other ways.

Members of the Collaboration who have left the Collaboration shall remain in the author list normally for one year after leaving the Collaboration or for certain papers, as determined by the Spokesperson. Authors shall be listed alphabetically except in the case of conference proceedings. Conference proceedings may be submitted in the speaker's name (or in the speaker's name followed by other major contributors listed in alphabetical order), followed by a designation such as: "for the CBM Collaboration". Technical (instrumentation, simulations etc.) papers may have as authors only those individuals who have contributed directly to the particular project, unless the paper is declared a CBM publication (cf. Sect. 3). The CBM Collaboration, however, should be acknowledged as well as other individuals who have supported the project.

## 7 Figures Repository

### 7.1 Types of Figures

This section presents the definition, usage, and approval mechanisms of the various types of official CBM figures:

- Simulation & Performance

CBM Simulation figures contain results of simulations of physics events and/or detector response, for example to illustrate expected performance of the detector, the size of corrections for detector effects, or reference distributions from event generators. CBM Simulation figures are discussed in the relevant PWGs and approved by the PWG convener(s) or Project leader(s).

CBM Performance figures are used to illustrate aspects of detector performance, in a general context, independent of a specific analysis. Any figures that illustrate intermediate steps in an analysis are CBM Preliminary figures. CBM Performance figures are intended to illustrate the quality of the calibration, the behaviour of CBM (sub-)detectors, the resolution for tracking or particle identification techniques, etc.. Performance figures can be shown outside the collaboration after approval by the relevant PWG convener(s) or the relevant Project leader(s).

- Preliminary

CBM Preliminary figures are intended for presentation at conferences and workshops. Each CBM Technical or Physics Preliminary figure must be approved by the PWG convener(s) and Physics or Technical Board before it can be shown outside the Collaboration. CBM

Physics and Technical Preliminary figures should be accompanied by an Analysis or Technical Note, which contains all relevant information about how the figures were obtained.

- Published

CBM Published figures are all figures containing final results that appear in a publication or Public Note. Each CBM Published figure is stored in the Repository, with reference to the corresponding publication or Public Note. When a figure is published, the corresponding Preliminary figure(s) are removed from the Repository (or marked obsolete).

## 7.2 Bookkeeping of Figures

Each PWG and Project Group, in consultation with the Editorial Board (EB), contributes to an CBM Repository of Figures accessible via a web interface located at <http://.../Figure/>. The Repository is maintained by the CBM web master(s).

## 8 Student Theses

The Editorial Board maintains a list of CBM students and their thesis topics. All student theses presenting CBM data must be made available to the collaboration upon acceptance of the thesis and uploaded to the corresponding CBM web site. It is the responsibility thesis advisor(s) to ensure that an electronic copy of the thesis is uploaded in a timely fashion. Data and analyses presented in a student thesis but not (yet) in CBM Conference Proceedings or in refereed publications are not considered to be published CBM results. Results and figures obtained by the student and (yet) not approved as outlined in Sects. 4.2 & 7 must be labelled "this thesis".