4 December 2025

BESIII Publication Policy

Preamble

The BESIII collaboration is committed to bring results to publication quickly while maintaining the highest quality of scientific content and presentation. All collaboration members are expected to contribute to this goal. Group leaders have a special responsibility to ensure that students and postdocs are appropriately mentored in effective communication in all relevant forms, including oral presentations, internal documents and journal publications. The Physics Coordinator and Deputy Physics Coordinator play leadership roles in the publication process. They have the responsibility to oversee and monitor all physics analyses and to help guide papers through the internal review process. The Physics Coordinators monitor the work of referees and provide necessary reminders of expectations and deadlines. It is also the responsibility of the Physics Coordinators to manage the BESIII publication web pages, containing all analysis memos, talks, papers, and a list of current analyses with their authors, referees and publication status.

Responsibilities and Composition of the BESIII Publication Committee

The BESIII Publication Committee has three principal responsibilities:

1. Develop and maintain the BESIII Publication Policy defining the requirements for authors, referees and management for journal publications, conference talks and other aspects of the preparation and dissemination of BESIII results.
2. Upon referral by the Physics Coordinators and/or Spokespersons, resolve analysis and publication disputes that arise among authors, referees and management.
3. Directly participate in ensuring the quality of BESIII papers by carrying out editing of manuscripts in the final stages of collaboration review.

The Publication Committee consists of ten members. The chair and four additional members constitute the standing Publication Committee, nominated for renewable three-year terms (staggered so that no more than two members change each year) by the Spokespersons in consultation with the Executive Board and with the approval of the Institutional Board. The standing Publication Committee is responsible for developing and maintaining the BESIII Publication Policy and for dispute resolution. The Physics Coordinator, Deputy Physics Coordinator and Spokespersons are all *ex officio* members of the Publication Committee.

The final editing of manuscripts is the responsibility of the full Publication Committee, which consists of the five standing committee members and five additional members whose only responsibility is editing. These additional members are nominated by BESIII institutions and selected by the Standing Committee for one-year terms.

Analysis Organization

1. All BESIII data analyses will be organized within the framework of a BESIII Physics Working Group (PWG). An initial presentation should be given at a PWG meeting, a Physics and Software Workshop or a collaboration meeting, with video connections for remote participation. The objective of this presentation is for authors to receive comments and to assess with the PWG whether the work is publishable.

2. If an analysis involves more than one individual or group, then they should coordinate their efforts with the help of the PWG conveners. All parties should communicate openly throughout the analysis and review process.

3. To the maximum extent possible all BESIII analyses should use standard analysis tools and common procedures for data reconstruction, corrections and estimation of systematic uncertainties. It is the responsibility of the analyst to justify departures from standard procedures and for the PWG conveners and Physics Coordinators to determine that they are approved for use.

4. Every analysis to be considered for publication must have a detailed memo prepared in English using a standard template and made available to all BESIII members via DocDB. It should include information about the data set(s) used, software versions, selection criteria with justifications, relevant plots including data/Monte Carlo comparisons, numerical results, and interpretation. This document should be sufficiently detailed so that other BESIII members could reproduce the analysis. Computer codes must be shared with BESIII collaborators on request.

5. The Physics Coordinators and PWG conveners are responsible for judging if an analysis has been carried out effectively and is mature enough to enter the refereeing process. When the determination has been made that an analysis is ready, the Physics Coordinators appoint a Referee Committee in consultation with the PWG conveners. The Referee Committee consists of three persons from at least two institutions. One member is designated as chair, with the responsibility to coordinate the review. The Referee Committee's responsibility continues until the paper is published.

6. The Referee Committee's first responsibility is to ensure the correctness of the analysis by thoroughly reviewing the memo. The complexity of an analysis will determine the time required for initial feedback to the authors, as well as for their subsequent responses to questions and comments. It is the responsibility of the Referee Committee chair to set clear expectations for timely response and to follow up with referees and authors to ensure that goals are met. To provide a permanent record, discussions should be conducted via HyperNews. Minutes of teleconferences should be prepared and posted on HyperNews by the Referee Committee chair. Changes in analysis procedures and results that occur during the referee process should be documented by revising the body of the memo (i.e., not in

an appendix).

7. Authors and referees are encouraged to discuss the publication plan (including target journal) as early in the referee process as possible, and authors should begin preparing a manuscript draft well in advance of completing the analysis. Once results are finalized, the draft should be completed and presented to the referees for a prompt review and suggestions for improvements in content and presentation. Referees are responsible for ensuring that paper drafts meet acceptable editorial standards. If a draft is substandard, it should be returned to the authors. For submissions to any journal that requires a written justification describing how the submission meets the journal's acceptance criteria, the justification should be prepared as a companion to the paper draft and should be reviewed alongside the paper draft in every step of the publication process.

8. Authors and referees are also encouraged to think about how the material included in the paper draft might be used outside the collaboration (e.g. by theorists) after publication. If possible, efficiency-corrected and background-subtracted distributions should be provided in the paper. Otherwise, it may be beneficial to supply efficiencies or resolutions as supplementary tables in the publication. To further facilitate the use of BESIII results after publication, relevant published material (which may include tables, results, or distributions) should be submitted to the HEPData database. The selection of material appropriate for submission to HEPData should be discussed during the review process. A BESIII Data Coordinator will be responsible for initiating submissions to the HEPData database. Sharing event-by-event data (which includes four-vectors) beyond the collaboration is generally not allowed -- but special cases where this could be beneficial should be discussed during the review process (i.e. before publication) and should be approved by the spokespersons.

9. In some cases the referees and authors may disagree about the scope of an analysis, the procedures followed, the need for additional crosschecks or studies, the readiness or plan for publication, or other matters. If they cannot reach agreement, the Referee Committee chair should consult with the Physics Coordinators and PWG conveners. If a resolution and plan to complete the analysis can still not be found, then the dispute should be referred to the standing Publication Committee. All parties are obligated to abide by the recommendation of the Publication Committee.

10. At the conclusion of their review, the Referee Committee votes on the readiness of the analysis and paper draft. A positive recommendation to proceed to publication requires at least two of the three referees to give explicit approval, with no referee objecting. The Referee Committee chair forwards the recommendation to the PWG conveners and the Physics Coordinators for their approval. After approval, the

Physics Coordinators will arrange for a paper approval meeting and will assign the paper to three to five Reading Groups as described in Appendix A.

11. The purpose of the paper approval meeting is to start the collaboration review process and present the paper. More details on the expected content of presentations in this meeting are given in Appendix C. Attendance at the meeting is required from at least one of the proponents, at least one of the Referee Committee, at least one convener from the relevant PWG and the Physics Coordinator. In the case that the proponent is a PhD student, attendance from their advisor is also required. Representatives from the assigned reading groups are encouraged to attend. The meeting will be announced to the full collaboration and any member of the collaboration may attend. Minutes of the meeting will be taken by the Physics Coordinators and posted to the analysis hypernews. The Referee Committee is responsible for ensuring that all physics questions are followed up and satisfactorily resolved and that all suggestions for paper improvement are implemented. The approval is forwarded to the Physics Coordinators along with the latest paper draft. In the case where the changes to the analysis are substantial the Physics Coordinators can require that the paper approval meeting stage be repeated.

12. If the referees' recommendation to proceed is accepted, the Physics Coordinators post the manuscript for Collaboration Wide Review (CWR). The reading groups will be provided with guidelines for their review. These guidelines will be formulated in consulation with the Publication Committee. The reading period will last approximately two weeks. The authors must then address all comments submitted during CWR, with responses and a revised manuscript posted on HyperNews after Referee Committee consultation. Alongside the revised manuscript, the revised and updated Memo is also posted to the HyperNews after the Referee Committee have checked that any changes to the analysis during the entire Referee Committee process have been adequately documented in the Memo.

13. Following the CWR, the manuscript is forwarded by the Physics Coordinators to the Publication Committee for final revision. The primary objective of this step is to ensure that the paper meets BESIII editorial standards, but if the Publication Committee editors have questions about the paper content, then these can be referred to the authors and referees, who must consider them and respond. The Publication Committee revisions should be completed within two weeks unless extensive changes are required.

14. When the Publication Committee completes its revisions, the manuscript is returned to the Physics Coordinators and submitted for Spokesperson approval. One Spokesperson is assigned to each paper, and he or she consults with the other Spokespersons as needed. Following Spokesperson approval, the corresponding

author submits the paper to the journal and hep-ex and the submission is announced to the collaboration.

15. When the corresponding author of a submitted paper receives peer reviews from the journal these should be posted promptly to HyperNews. Following discussion, the authors should formulate the response to the journal editor and, if necessary, prepare a revised manuscript. The Physics Coordinators should be notified immediately of any significant changes in the paper's results. When the response and revised manuscript have been approved by at least two of the three referees (with no referee objecting), and by the conveners and Physics Coordinators, the revised manuscript can be submitted to the journal and posted on hep-ex. Analysis documentation on the BESIII website should also be updated at this time, and, if the Physics Coordinators judge any changes to be sufficiently significant, the resubmission should be announced to the collaboration.

Review Procedures – Conference Presentations

16. Preliminary BESIII results can be presented at conferences and published in conference proceedings before final results are ready for journal publication. The Referee Committee process described above also serves as the mechanism for reviewing analyses for conference presentation. The analysis memo should be available at least one month before a conference to allow sufficient time for review. A positive recommendation requires that at least two of the three referees give their explicit approval and that no referee objects to presentation. The Physics Coordinators and BESIII Spokespersons must give approval before new physics results can be presented. At the discretion of the Physics Coordinator, important and highly topical results can be given accelerated reviews.

17. To facilitate clear and consistent conference presentations of preliminary results by BESIII speakers, authors should provide a concise set of PowerPoint slides to the Physics Coordinators for posting in a central repository. These slides should include the following analysis details:

    - Physics motivation and significance
    - A list of key selection criteria
    - Plots important to understanding the analysis
    - Final results: plots and numerical measurements with uncertainties
    - Information about the most important systematics
    - Conclusions

    These slides must be approved by at least two referees (with no referee objecting) and posted no later than seven days before the first presentation. The Physics Coordinator will update the repository when the preliminary results are superseded.

18. Only one preliminary result should be presented publicly for any physics analysis, except in special circumstances when the Physics Coordinators determine that updating a preliminary result is in the collaboration's best interest. In general, talks subsequent to the initial presentation should use the same preliminary result until the analysis is finalized and a paper has been accepted for publication.

19. Conference talks should be posted for collaboration review at least one week before scheduled presentation. Authors should revise the slides to address any concerns that are raised and arrange with the BESIII Speakers Bureau to present a practice talk, which provides a final opportunity for collaboration input. There must be a consensus that the physics results and presentation are appropriate, and any further suggestions should be incorporated into the talk before presenting at the conference. Conference proceedings papers should be announced to the collaboration and approved by the Physics Coordinators before submission.

Author Lists for BESIII Papers

20. The author list for each BESIII publication will be constructed based on information in the member database at the approximate date of CWR. It is the responsibility of IB members to ensure that the member database is up to date, and the responsibility of the Physics Coordinators and BESIII database manager to verify that author lists are compiled correctly.

21. Anyone who is designated as an "author" in the BESIII member database and has been a member of the collaboration for at least one year will be included on the author list for all BESIII collaboration papers. Authorship continues for as long as the individual meets the obligations of a collaboration member and for a period of one year after leaving the collaboration. An individual can appear as an author sooner after joining or later after leaving in the case of exceptional contributions to a particular paper. This determination is made on the recommendation of any senior collaboration member with first-hand knowledge of the contributions, with the final decision being made by the Physics Coordinators and Spokespersons.

22. Students, visitors, theorists with expertise on a specific topic, and other individuals who are not designated as authors in the BESIII member database, but have made significant contributions to a paper, may be eligible for authorship on that paper. Any senior collaboration member with first-hand knowledge of such contributions should propose special authorship to the Physics Coordinators and Spokespersons, who will make the final decision in consultation with the appropriate PWG conveners and paper referees.

23. A BESIII member has the right to remove his or her name from the author list of a particular paper if he or she does not agree with its content or feels that his or her contributions were insufficient. Requests to be removed from authorship should be

sent to the paper's authors and the Physics Coordinators.

Graduate Student Theses

24. The Physics Coordinators will maintain an up-to-date list of graduate student thesis topics. The PWG conveners should coordinate the student topics, and the Physics Coordinators may aid in resolving any conflicts. All students completing a BESIII Ph.D. should arrange to post her or his thesis on the BESIII website.

Erroneous Publications

25. When an error is discovered in a BESIII publication, the Physics Coordinators, in consultation with the Spokespersons, are responsible for taking appropriate action, which may include some or all of the following:

    a) Inform all BESIII members about the problem and that the erroneous results should not be used in any talks, papers, etc.

    b) The Physics Coordinators should designate a group, which may be the Referee Committee, to understand the error and any lessons that can be learned. When a new result is available and its correctness verified, it should be publicized appropriately, including announcement to the collaboration and submission of a retraction or erratum to the journal and hep-ex if results or interpretations change substantially.

Confidential Analysis Information

26. BESIII members are prohibited from communicating results or other sensitive information about any physics analysis outside of the collaboration before that analysis has been released for public presentation. Consultations with theorists or other experts outside of BESIII should be conducted with discretion, and only when the consultants agree that preliminary results or other information will not be disseminated or referenced until released by the collaboration. Any theorist on the faculty of a BESIII institution who serves as the thesis supervisor or co-supervisor of a BESIII graduate student is allowed access to BESIII data and unpublished BESIII results to the extent relevant and necessary for the research of the student. These individuals must agree not to use their access to produce theoretical results that could not be obtained with publicly available information.

Publications Using BESIII Software

27. In normal circumstances only BESIII publications, which are signed by the entire collaboration and pass through the procedure described above, may make use of the BESIII software framework. Exceptions to this rule can be granted by the spokespersons. For example, sensitivity studies for a future super tau-charm factory could greatly benefit from the BESIII software framework and should be

encouraged. Authors of these non-BESIII publications should discuss their plans with the spokespersons at an early stage of the process. Once approval has been granted by the spokespersons, a few additional guidelines should be followed: (a) "BESIII" should not be included in the title of the publication; and (b) the following should be included in the body of the publication: "The material presented in this paper is that of the authors alone, and has not been reviewed by the BESIII collaboration; however, we thank our colleagues for allowing us to make use of the BESIII software environment."

Review Papers by BESIII Collaboration Members

28. Inclusion and fair treatment of public BESIII results in reviews or other single- or few-author papers is expected. As a matter of courtesy, authors of such papers who are members of the collaboration are asked to provide a copy of the manuscript to the Spokespersons at least two weeks prior to the intended submission. If serious concerns arise that a paper may negatively affect BESIII interests, then discussions among the authors, Publication Committee and Spokespersons should occur with the goals of resolving any misunderstanding and maintaining collegial collaboration.

Press Releases

29. Members of the BESIII collaboration should not issue a press release or call press conferences without the approval of the Spokespersons, who will consult with the members of the IB.

Corresponding Authors

30. Publications will not include special designation for any corresponding author(s). In cases where contact information must be included within a publication, a common BESIII email address (besiii-publications@ihep.ac.cn) will be used. Members of the community with questions or comments on publications can find general contact information on the BESIII website. If a BESIII member receives a substantial question or an informative comment regarding a BESIII publication, the discussion should be forwarded to the Physics Coordinator and to the Hypernews associated with that publication.

APPENDIX A – Collaboration Wide Review Reading Groups

Manuscripts that are approved for Collaboration Wide Review (CWR) are made available to all BESIII members to participate in the evaluation of physics content and editorial quality. The collaboration has established formal Reading Groups to achieve increased participation in the CWR, help authors and referees improve paper readiness and reduce delays in the Spokespersons' review, and to share responsibility for paper quality

more evenly and fairly. Each paper is assigned to three to five reading groups, each representing a BESIII institution or a designated subgroup of an institution. The response time for reading group reports is specified by the Physics Coordinators, and is generally two weeks.

The Physics Coordinators provide overall management of the CWR and Reading Group processes. The collaboration depends on all groups conscientiously meeting their obligations, and the Physics Coordinators will maintain statistics about assignments and assess whether groups are meeting expectations.

APPENDIX B – Procedures of the Publication Committee

The Publication Committee will develop and document procedures to carry out the responsibilities assigned to it by the BESIII Publication Policy. Both the organization and the editing process will entail significant challenges that are best addressed with flexibility, so the description presented here should be viewed as an initial proposal.

It is essential to expand the pool of BESIII members who contribute effectively to the quality of our papers, so we must look beyond the "usual suspects" who already carry a heavy load of "polishing." Each BESIII group through their IB representative will be asked to nominate one or more group members for service on the expanded Publication Committee. The standing Publication Committee will review the nominees and identify qualified individuals for one-year appointments. We anticipate that these appointments will not be restricted to senior physicists. This could be an excellent learning opportunity for postdocs with reasonable competency in writing scientific papers, and the standing committee will provide mentoring to them to help develop their editing skills. To encourage individuals to take on this service, the group's shift obligation will be reduced by the equivalent of 1 FTE for each completed year of service on the Publication Committee with a full editing load. Management is encouraged to formulate other incentives to encourage individuals to take on this service.

When a manuscript is submitted to the Publication Committee, the Chair will manage the editing process by assigning one member to lead on editing (the "primary") and another to consult and provide quality control (the "secondary"). The Publication Committee commits to return edited manuscripts within two weeks, unless they report to the Physics Coordinators that extenuating circumstances prevent it. With 30 papers per year and a ten-member committee, the yearly load for each Publication Committee member would be three papers as primary and three as secondary. If the BESIII output grows significantly above this level, then the Publication Committee should be augmented with additional non-standing members. As of 2025, there are more than 100 papers per year and the committee has been expanded to 8 standing members and 8 additional members.

APPENDIX C – Content of the Paper Approval talk

The primary purpose of this talk is to have a good overview of the final physics and results to be presented in a paper, noting that large changes can sometimes occur during the referee committee stage. The secondary purpose of this talk is to ensure that the paper draft adheres to high standards. It is expected that the discussion is based both around the physics itself and also the presentation of the physics in the paper.

The proponent will present the paper, providing the motivation, full methodology and final results and any key conclusions. The talk should contain the final results presented in the paper. The talk should also make sure that all tables and figures from the paper are included in the talk along with their captions. This is so that comments on figure quality and readability can be made. In addition this step should help avoid numerical errors.

The chair of the Referee Committee or if preferred another member of the referee committee who has been delegated the responsibility will present a few slides that discuss the summary of the discussions between the proponents and the Referee Committee which will include the issues raised and how they were addressed.

After both presentations there will be time for discussion and questions from any of the attendees. The Physics Coordinator will write into the minutes any questions of physics or style that need to be followed up prior to commencing the next stage of review.