

Publication Policy of the ePIC Collaboration

- Version 2 -

In Progress

1. Publication categories

This publication policy details the different steps that ePIC authors must take to bring the results obtained to a final publication. The individual steps are sub-divided for three specific paper categories: conference proceedings, technical and software papers and physics papers or *general papers*¹. Each category has its own workflow and decision chain based on the results and the individuals involved. For the purpose of publication reviews, the Publication Policy Committee (PC) will be extended to a larger editorial board (EB) to be elected by the Collaboration Council.

1.1 Conference Proceedings

Conference proceedings are based on information presented by a collaboration member in a conference talk or poster. Whether the proceedings are peer reviewed or not, the approval process remains the same. Since the talk/poster had to be approved by a previous decision chain, which is already detailed in the Conference Committee Policy, the publication will follow the same procedure for the proceedings. That means conference proceedings will be reviewed under the guidance of the relevant Detector Subsystem Leaders or working group conveners, together with the technical/computing/physics coordinators, and the final approval by the PC/EB.

1.2 Technical and Software Papers

Technical papers refer to detector papers, software/computing papers, and analysis techniques papers, and software papers refer to any detector or physics analysis based on simulated data produced without the ePIC simulation/reconstruction software. Decisions

¹physics papers are meant as publications based on the analysis of real experimental data, leading to measurements of physical observables. Conversely, general papers are meant as publications that demonstrate measurable physics processes or detector capabilities using simulated datasets from ePIC monte Carlo productions, without relying on actual experimental data.

on Technical and Software papers will be initiated and overseen by the respective Detector Subsystem Leader. The Detector Subsystem Leader can choose to form an internal review committee of experts. The only reviews by non-project members, will be in the final steps of the decision chain, namely the required approval by the technical/computing/analysis coordinator and the final approval by the PC/EB.

1.3 Physics Papers / General Papers

A physics/general publication in a peer-reviewed journal requires the full decision chain and work flow, which are detailed in Section 2.

2. Workflow and decision chain - from analysis to peer-reviewed publication

All publications described in this policy should be based on measurements that are appropriately approved and labeled, according to the ePIC Result Release Policy on publishable data.

The most elaborate publication category, which is the final physics/general papers, will have to pass through the following decision chain before submission to the journal.

- a.) the physics working group or technical project coordination.
- b.) the physics coordinators and the collaboration forum.
- c.) the internal review committee.
- d.) the institutional and collaboration reviews.
- e.) the publication committee/editorial board.
- f.) the spokesperson's office.

2.1 Physics Working Group duties and guidelines

A paper starts with the formation of a primary author (PA) group within a Physics Working Group (PWG). The group should have a common interest. The size of the group can be determined by the authors themselves under the guidance of the working group conveners.

At the appropriate time, the PAs will propose an analysis to the physics working group. Following discussions within the group, the conveners, after consulting with the PAs and other members, will determine whether a second analysis is warranted due to the complexity and relevance of the topic. If so, the conveners will coordinate with the Physics Working Group to identify a member who will conduct an independent analysis, aiming for both analyses to proceed and conclude in parallel. At the time of completion of the analysis, the PAs will draft an analysis note, which will be internally reviewed in the working group by an Analysis Review Committee (ARC), chosen by the conveners.

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 ePIC Web site. Upon approval of the analysis note by the conveners, the PAs propose a manuscript of a certain length with a defined set of figures for publication in a particular journal, accompanied by the detailed analysis note, which contains all information needed for the reproduction of the analysis, including a detailed uncertainty determination of the final results. The data and software used in the analysis note need to adhere to the accessibility policy in Sec. 4.1.

2.2 Physics Coordination and Public Forum

This proposal will be reviewed in a public forum by the physics coordinators, under the advice of the physics working group coordinators, for its suitability in terms of journal choice, content, and figures. If it passes this review, the PC/EB will choose an internal review committee (IRC), consisting of three to five collaboration members to review the paper and the analysis steps. The PAs by default will be part of the IRC and may give suggestions to the PC/EB regarding its members.

2.3 Internal Review Committee duties and guidelines

The IRC has particular duties that go beyond the review of the analysis method and physics message, including quality assurance of the analysis code (availability and applicability), as well as the appropriateness and correctness of the language used in the paper. The initial IRC review should be limited to three months or less. The IRC will submit written updates on the paper progress to the PC after three months and then monthly until the completion of the review process. Every six months, IRC Chairs will meet with the PC during a collaboration meeting to provide an oral update. An IRC can be replaced by the PC due to inactivity after a one-year review period.

2.4 Collaboration and institutional review guidelines

After IRC approval, the PC/EB will submit the paper for simultaneous reviews by the whole collaboration and five institutions selected by the PC/EB. Both reviews are to be completed within two weeks. The combined comments, which are collected on the paper webpage, will be addressed by the primary authors in up to four weeks after receipt. The potential changes and answers submitted by the PAs will be reviewed and approved by the original commenters within one week.

2.5 Final Administrative Approvals and Journal Submission

This version of the paper will then undergo a final reading by a selected PC/EB member within one additional week, before the paper will be approved by the spokesperson's office.

Upon final approval, the PC/EB, in coordination with the primary authors, will send the paper to the journal and simultaneously post it on the preprint server. A designated primary author will be appointed as the contact person for correspondence with the journal. After publication, the authors are responsible for making the analysis results available to the public in compliance with Section 4 of the policy.

2.6 Guidelines for Publication Re-Submission

Journal reviews which require revisions have to be addressed by the primary authors, and then approved by the IRC and the PC/EB before re-submission.

3. Guidelines for extraordinary publications

3.1 Guidelines for Erroneous Publications

Examples leading to erroneous publications include, but are not limited to: fundamentally wrong steps in the analysis leading to erroneous results, a plot/graph that incorrectly represents the present work or the work of others, a statement or statements that improperly describe the analysis or the results or the implications of the results. Somewhat less serious mistakes include a misstatement describing the work of others, the inclusion of the work of others without proper attribution, a missed citation or reference, an incorrect historical statement, an erroneous attribution, or a plot/graph with minor mistakes. When a mistake is discovered in an ePIC publication, and depending on its severity, the following actions should be considered and, if appropriate, some or all should be implemented by the PC/EB in consultation with the spokesperson, the primary authors, the relevant working group conveners, and the internal review committee

- Inform the community as soon as the mistake is discovered by notifying the Deputy/Associate Directors at the two host laboratories (BNL and JLAB).
- Inform all ePIC Collaborators and impose that the erroneous result should not be used in any future presentations, papers, etc.
- Consider a formal retraction if the mistake changes the qualitative implications of the publication.
- The PC should form an ad-hoc internal committee to investigate and understand the origin of the mistake and any lessons that can be learned from the incident.
- Once a new result is available, this committee will verify its reliability. The new result will then be publicized in a presentation, at an appropriate meeting or conference.

- Publish an erratum and, if appropriate, publish a new paper with the correct results. 126
The process for the review of the erratum must follow the standard procedures for 127
the publication of ePIC results. The membership of the IRC may be the same as 128
that for the original paper. The author list for the erratum should be the same as 129
the author list for the original publication (including authors who have since left 130
ePIC) and may include additional authors who have made specific contributions to 131
this erratum, including new results. 132

3.2 Guidelines for Press Releases 133

Members of the Collaboration or participating universities/laboratories should not issue 134
press releases or call press conferences without the written consent of the spokesperson's 135
office. 136

4. Accessibility of data and software inside and outside 137 the collaboration 138

4.1 Accessibility inside the collaboration 139

All data obtained with the ePIC detector are available to all collaborators for analysis. 140
The groups and institutions responsible for each subsystem must ensure that the neces- 141
sary analysis tools, algorithms, codes, and correction parameters for that subsystem are 142
available, documented, and kept up-to-date. All physics analyses in ePIC must comply 143
with the ePIC policy for data and analysis preservation. Requests from colleagues within 144
the collaboration to provide code and parameters must be granted and accompanied by 145
publishing the analysis code in a repository in the GitHub organization of the ePIC col- 146
laboration, available for all collaboration members. 147

4.2 Accessibility outside the Collaboration 148

Given the overriding principle of open communication, collaborators should, upon request 149
from a colleague, provide relevant input assumptions that would permit published results 150
to be checked and confirmed. Detailed analysis code can be made available on a case- 151
by-case basis, but should not be shared without approval by the physics coordinator. 152
The results themselves will be stored and made available on a service platform, such as 153
'hepdata', in tabularized form upon publication of the paper. 154

4.3 Book keeping of all figures and paper versions during the work flow

Each working group, in consultation with the Publication Committee, contributes to an ePIC Repository of Figures accessible via a web interface.

The repository contains all figures of all publishable data categories. Each figure entry in the Repository specifies a Contact Person and is accompanied by a complete caption. Each figure must include clearly labeled variables and units of measure, plus a legend specifying the colliding systems and energy and the nature of the uncertainties (statistical and systematic). Figures must explicitly include an ePIC label according to their data category.

ePIC simulation, performance, Work in progress plots can and need to be updated with their most recent version. ePIC preliminary plots can only be updated with ePIC final plots that are approved for publication.

A paper webpage and repository will be established when the paper has been proposed to the physics coordination and will be closed when the final version has been approved by the journal. The analysis note and all paper versions, as well as all comments throughout the drafting and review processes will be maintained on the affiliated website.

5. Authorship guidelines

5.1 General paper authorship

An official ePIC Author List will be maintained by the Publication Committee and published on the ePIC Author List website.

At least once per year, the Spokesperson shall solicit an author list from each institution via the ePIC council representative. Inclusion in the institution's author list implies that the individual must have worked on ePIC for at least six months and must be an 'Active Member' according to the membership rules. In general, collaborators on an institution's author list are encouraged to contribute to some aspect of the design, construction, and operation of ePIC. Authors who have been collaborators for at least one full year will remain on the institution's author list for one year after leaving the Collaboration. Changes to the institution's author list may be made between annual solicitations by communicating these to the Publication Committee by email.

All persons listed on the ePIC Author List will be authors on all ePIC physics/general publications. In infrequent cases, one or more ePIC authors may choose not to be listed among the authors on a given paper. This may arise because of disagreements with the contents of the paper that were unable to be resolved. In these cases, it is the responsibility of these authors to notify the spokesperson and the PC in writing (e-mail) of their request to be removed from the author list for that specific paper.

Occasionally additional authors, who are not listed on the ePIC Author List, may

be added on specific physics/general papers. Such additions may include a student or a former ePIC collaborator who has left the collaboration for more than one year, who have made significant contributions to a detector in ePIC or to the analysis or software development that was significant for a specific result in the paper. Such inclusions can be initiated by the relevant council representative, the principal authors, WG conveners or Detector Subsystem Leader. The inclusion must be endorsed by the PAs and approved by technical/computing/analysis coordinators, the publication committee and the Collaboration Council.

The authors of papers will be listed in alphabetical order, preceded or followed by the phrase "ePIC Collaboration". Papers for conference proceedings are normally submitted in the speaker's name, plus other major contributors if appropriate, plus "on behalf of the ePIC Collaboration".

5.2 Technical and Software papers with limited authorship

Technical and Software papers need only list as authors those individuals who contributed to that project, but the "ePIC Collaboration" should be acknowledged. The decision of the final author list lies with the Detector Subsystem Leader and the technical/computing/analysis coordinator, and can include non-ePIC members or all members. Detector Subsystem leaders are allowed to initiate ePIC sub-groups (e.g. the ePIC-TOF group or the ePIC luminosity group) for the purpose of publication and presentations, but the member, and subsequent author, lists have to be approved by the respective coordinators and the spokesperson's office.

5.3 Few author physics/general papers

Few author papers that include 'Preliminary ePIC results' fall under these special guidelines. The intent here is to avoid placing 'Preliminary ePIC Results' in the public print domain, to which citations can point. The concern is that these results can and at times do change rather dramatically yielding substantially altered physics interpretations. The standard exception is the case of Conference Proceedings, which implies that these 'Preliminary ePIC Results' were presented orally and visually at conferences.

For standard publications, ePIC Collaborators should not publish "single" or "few" author papers that include 'Preliminary ePIC Results'. Exceptions may be granted by the Spokesperson if, at a minimum, the preliminary results are with the IRC or approved by the PWG and the publication of these preliminary results will not negatively impact the final ePIC publication of the result.

5.4 Thesis guidelines

The Spokesperson will maintain a list of ePIC students and their thesis topics, which will be posted on a website and updated annually. Council members are urged to inform the

spokesperson of a student's thesis topic, chosen or changed at any time. In addition, this 228
list can be used by the Conference Committee, DSCs and all Working Groups to track 229
student activity and promote student involvement in conferences. 230

Official collaboration approval of a thesis completion also requires completion of the 231
student's service work duties. It is the responsibility of the WG convener(s), and Detector 232
Subsystem Leader(s), together with the thesis advisor(s), to ensure that an electronic copy 233
of the thesis is uploaded to the ePIC document server in a timely fashion after completion. 234
Data and analyses presented in a student thesis but not in ePIC Conference Proceedings 235
or in ePIC refereed publications are not considered published ePIC results. 236