



MEMORANDUM

DATE: February 14, 2018 (Original version March 15, 2007)

TO: The LIGO Scientific Collaboration
 FROM: The LSC Publications and Presentations Committee
 SUBJECT: LSC Review Procedures

One of the provisions of the LSC Bylaws is the creation of a Publications and Presentations Committee. Among other functions, the P&P committee is charged with:

- maintaining a public archive of publications and presentations
- managing the reviews of LSC technical publications and conference proceedings
- managing reviews of abstracts and presentations at conferences
- nominating speakers for conferences

This memorandum outlines the specific procedures and timelines for LSC members to follow with regard to **observational papers**, **technical papers**, **abstracts**, and **presentations**.

The P&P web page is here: <https://www.lsc-group.phys.uwm.edu/ppcomm/>

1. Observational Papers

Reviews for observational papers are handled by review committees for the individual data analysis groups and as such are not covered here. Instead, we lay out a specific time line for the steps to publication. If, at some stage in the review, major changes in a manuscript are required, the Spokesperson may extend the time line, or suggest that we go back to a previous step and re-solicit comments.

1. **The author list.** The composition of the author list is specified in the LSC Publication Policy (T010168, latest revision). Before publicly posting a manuscript, the analysis groups should confirm that they have the correct author list. LSC policy states that the correct author list is the one in place when the paper is *first circulated to the collaboration* by the P&P Committee. A record of these dates is kept in the “pre-publication tracking” page, which is linked from the P&P web page. For LSC-Virgo papers, authors should check with the Virgo Editorial Board. A list of recent LSC and LSC-Virgo author lists can be found in the P&P web page, but a final check with the Spokesperson and LSC Election and Membership Committee (and VEB, if applicable) should be done.
2. **Presenting the results to the collaboration.** The analysis group makes a presentation at an LSC meeting with (what they believe are) the final results of the

analysis. This presentation must be preceded by making a complete manuscript available to the collaboration **at least three days** prior to the presentation. It is probably optimistic to hope that the analysis and the manuscript will be universally accepted without comment from the collaboration; however this should be the goal.

3. **Two week period for comment from the collaboration.** Following the presentation, there will be (at least) a two week period for comment from the collaboration at large. Comments should be directed to the analysis group chairs, the LSC spokesperson and the Analysis Committee Chair. The analysis group chairs should see that the review panel has access to the comments. During this period, all members (including the Executive Committee and the Review Panels, etc.) should make their opinions/suggestions about the manuscript known to the analysis groups.
4. **One-week period for analysis groups to address comments from collaboration.** The analysis groups will update the drafts to incorporate the comments/suggestions from the collaboration. [Clearly, if a major change is needed, the period can be extended and/or we can go back to step 2.]
5. **One-week period for reviewers to prepare a recommendation.** After the analysis groups have addressed the comments of the collaboration, the reviewers will make a recommendation about whether (or not) the paper should be published. The recommendation will be made to the LSC Executive Committee. Although this is a rather compressed period, most of the review work should already have been done.
6. **Opting out from author list.** When a paper is circulated to the collaboration for comment, collaboration members may opt out of authorship by sending an email to the Publications and Presentations Committee Chairs and the Spokesperson. The reason for doing so does not need to be specified unless the member opts out because she/he does not endorse the paper. In case of an LSC member having serious reservations about the scientific contents, the P&P chairs and the Spokesperson may at their discretion bring this up to reviewers and to the Executive Committee in their consideration of the paper.
7. **Meeting of the Executive Committee.** The LSC Executive Committee will meet to decide on whether or not the paper should be published. Normally, discussions will take place at the monthly meeting of the Executive Committee. The chairs of the review panels are invited to participate in this meeting. In reality, the decision will likely be a provisional approval, requiring some changes to the manuscript. The Executive Committee should lay out what steps need to be taken in order for the manuscript to be published.
 - The LIGO Lab has graciously agreed to pay the charges for **one page** of color figures in the journal, provided the LSC Executive Committee approves the request. A decision on color printing should be made at this meeting.

8. For LSC-Virgo papers, the approval of the appropriate Virgo executive committee should be sought in parallel to that of the LSC Executive Committee
9. **One week period for groups to address recommendations from the Executive Committee.**
10. **Draft public outreach “science summary”.** A draft public outreach science summary should be made available at this point for circulation to the LSC with the final draft of the paper in the next step. (The draft can also be provided with an earlier circulation of the paper.) It is understood that the EPO Committee will have approved the draft for circulation. Guidelines and procedures for preparation of the science summary can be found at: <https://wiki.ligo.org/EPO/ScienceSummaries#Guidelines>
11. **One week period of final comment from the collaboration.** This final waiting period is an opportunity for the collaboration to look the paper over one last time. At this stage, comments should be limited to serious errors, errors in the author list, etc. It is too late for issues of style or suggestions on what should have been done.
12. **Mature draft of science summary.** Before the paper is posted in a public area (next step), a mature draft of the public outreach science summary must be prepared and approved as such by the EPO Committee. Once the paper is posted, the science summary should be finalized, approved by the EPO Committee, and posted for the public as soon as is practical, and definitely before submission of the paper to the journal.
13. **Two week period of limited distribution of the manuscript outside the collaboration.** Our GWIC colleagues request that we make the manuscript available for comment outside the collaboration before submitting to a journal. Nominally, this will be done by posting the paper on the gr-qc and/or astro-ph archive and informing GWIC that the paper is there, but the Executive Committee and the LSC Spokesperson may propose other mechanisms to meet this requirement.
14. **Submitting to a Journal.** If there are no major modifications required/requested during the public posting period, the analysis group chairs should request final permission from the LSC spokesperson to submit the manuscript to the Journal.
15. **Sit and wait to hear from the journal.**
16. **Two week period for addressing the referee comments.** The analysis groups and their review panels should prepare a revised manuscript and response to the referee, and share these with the Spokesperson in draft form.

17. **One-week posting of referee reports, the response to the referee and the revised manuscript.** Provided the Spokesperson determines that the referee comments are “minor”, this period should be kept short. Once again, it is too late for issues of style or suggestions on what should have been done. At this stage, comments should be limited to serious errors.
18. **Re-submitting to the Journal.** The analysis group chairs should reconfirm with the LSC Spokesperson that everything is ok, and then resubmit the paper.

<i>Action/Step</i>	<i>Time Period</i>
Present initial manuscript to LSC	At least 3 days before presentation at LSC Meeting
LSC Comment Period	2 weeks
Analysis group revisions	1 week
Re-review of manuscript	1 week
Executive Committee approval	At monthly Executive Committee meeting
Analysis group revisions (if needed)	1 week
Final LSC comment period	1 week
Post on ArXiv; GWIC comment period	2 weeks
Submit to journal	Following GWIC comment period

2. Technical Papers and Conference Proceedings

The LSC Publication Policy (LIGO T010168, most recent version) in Section 3 describes the criteria for determining if a technical paper needs to go through the LSC review process. Briefly, if a paper contains instrumental data, if it was influenced by interactions with other LSC members or in working groups, if the work is included in the group’s LSC/LIGO MOU, or if it used LSC hardware and software resources for the purposes of analysis or design, the paper should go through a technical review.

2A. General Procedures

Technical papers are papers with limited author lists from LSC institutions that do not present observational (astrophysics) data or results. Conference proceedings can fall into this category present if they present previously published observational results. Review papers also fall into this category. The procedure for submitting and reviewing technical papers and conference proceedings is as follows:

- Obtain a LIGO ‘P’ number from the LIGO Document Control Center:
<https://dcc.ligo.org/cgi-bin/private/DocDB/DocumentDatabase>

- Upload the paper and initiate the PP review from the DCC page by using the PP button from the menu.
- Once the paper has been received, it will be circulated to the LSC and will be assigned an LSC editor from the P&P committee who will assign a reviewer. It will also be posted on the password-protected “reviewer’s database” linked from the P&P web page.
- The minimal review period is one week (including at least 5 working days) and conditional on 1) The results presented in the paper have been presented to the relevant working group prior to submitting for LSC review. 2) The authors have pre-arranged an independent and qualified LSC reviewer; the reviewer has provided her/his review and the authors have addressed all LSC relevant issues by the end of the one-week review period..
- At the end of a the period, reviews and comments from the LSC will be sent back to the author. In most cases, the author is free to submit to a journal once LSC critical issues and comments are addressed. In some cases, the LSC editor may ask to see the revised manuscript before submission. If a second review is required, the LSC editor will work to ensure an expedited review.
- Authors should update their DCC entry with the latest version of the manuscript and with publication data, as that becomes known.

2B. Special Procedures for Joint LIGO Lab - LSC Technical papers

For the special case where some of the authors are members of the LIGO Laboratory, additional procedures need to be followed. These procedures are detailed in the most recent version of LIGO-L950002. Specifically, the following steps are required:

- For technical archival journal publications involving both LIGO Lab and non-Lab authors, the LSC publications policy process (i.e., this procedure) is followed, with the added requirement that the manuscript be circulated (via web pointer) to the LIGO Lab staff one week in advance of submission to the journal for comments.
- All publications with any Lab authors must carry an appropriate acknowledgement of NSF support. Authors are personally responsible for ensuring that the following Acknowledgement is included on any paper on which their names appear (*verbatim*):

LIGO was constructed by the California Institute of Technology and Massachusetts Institute of Technology with funding from the National Science Foundation and operates under cooperative agreement PHY-0757058. This paper has LIGO Document Number LIGO-< USE ACTUAL DCC# HERE >.

In addition to the LIGO Lab acknowledgment, papers may carry acknowledgment statements by other LSC institutions.

2C. Special Procedures for Conference Proceedings

For conference proceedings presenting observational results, the author byline must be “Joe Author for the LIGO Scientific Collaboration [and the Virgo Collaboration]”. And the

official LSC or LSC-Virgo acknowledgment statement, as appropriate, must be used. For the most recent statement, see the P&P web page.

3. Presentations

3A. General guidelines for all presentations:

- Only results from LIGO/GEO data analysis that have been approved by the Collaboration Council (or the Executive Committee acting on behalf of the Council) may be shown publicly.
- Conference proceeding papers may only include observational results that have previously been published in a peer-reviewed journal or approved for presentation by the Council (or the Executive Committee).
- For presentations dealing with technical matters, talks may include slides with LIGO/GEO sensitivity curves and LIGO observational results that are already in the public domain (either published or already presented at major conferences or workshops).
- All presentations must have DCC G numbers assigned and visible on the viewgraphs at the time of the presentation. A G number can be obtained from the DCC: <https://dcc.ligo.org/cgi-bin/private/DocDB/DocumentDatabase>
- Please all see the “presentations checklist” linked from the P&P web page.

The following procedures should be followed by all LSC members for approval of presentations. **A summary of the steps timetables involved is given at the end of this section.**

3B. Procedures for All Public Presentations (Posters and Talks):

- Slides with LIGO and/or GEO strain curves and LIGO observational results must be referenced.
- Transparencies should be submitted to the DCC as close to the time of the presentation as possible, by uploading files to the DCC.
- The P&P review both for abstracts and presentations should be initiated from the presentation DCC page. Every time when abstract or new version of the talk is submitted to DCC and authors are ready for the review, they should use the P&P button on the talk’s DCC entry. Authors will be forwarded to newly created P&P data base entry in the P&P review web application, which is used to communicate with the reviewers.
- Once a reviewer is assigned to the talk, the authors will receive a P&P mail. The review comments will be posted on the talk P&P page. The authors must submit their responses to the same page. Once abstract or slides are approved, the authors will receive a confirmation e-mail.

3C. Invited presentations on Status of LIGO, GEO and on Observational Results

This category includes invited contributions to:

- A) Conferences and Workshops
- B) Seminars and Colloquiums

- The invitations to conferences and workshops can not be accepted without the P&P approval and shall be forwarded first to lsc-pp@ligo.caltech.edu. No prior approval is required for invitations to seminars or colloquiums. According to the P&P policy, the P&P committee, in collaboration with the LIGO Laboratory Speakers Committee and the person who received the invitation, will decide whether or not to accept and will select a speaker from the LSC. In almost all cases, the person receiving the invitation will be approved to give the presentation. If the invitee does not wish to accept the invitation, and the conference is of interest to the LSC, the P&P Committee would be pleased to identify a substitute.
- Once the speaking assignment is made, the person who received the invitation is responsible for responding to it.
- All invited talks should have LIGO logo and the byline “for the LIGO Scientific Collaboration” on the title page.
- The presenter at this point can obtain a DCC G document and upload the abstract to it. The same DCC entry is to be used also for uploading the presentation file(s).
- The abstracts should be submitted for approval (via the P&P review tool) **no fewer than 2 days** before the abstract submission deadline.
- The presentations and their revision should be submitted to the same DCC entry and the review should be requested via the P&P review tool at least **one week** before the presentation.
- If the talk includes new results to be presented at major conferences, the speaker, in collaboration with the analysis groups, must first obtain the approval of the Council (or the Executive Committee).
- For seminars and colloquia, the pointer to the DCC entry with a reasonably final presentation should be emailed to lsc-pp@ligo.caltech.edu for P&P approval before the presentation, preferably a week in advance.

3D. Contributed Presentations

Authors of contributed presentations should follow the following procedure:

- No prior P&P approval is needed if authors plan to present a contributed talk.
- If unpublished work of a large group of LSC members is presented, the contributed talks should be presented on behalf of the LSC and the authors should consult with the LSC working groups prior to requesting the P&P review. “Large group” means a significant part of the LSC working group. Presentations by few people presenting published results or/and technical matters (analysis methods, for example) do not require “for the LIGO Scientific Collaboration: byline.”
- The LSC members should submit their abstracts to DCC and request the P&P review. When filling in the P&P talk entry, the authors should indicate date, place, conference and title of the presentation in advance to the abstract submission.

- When authors are ready with the presentation, they should upload it to the same DCC entry and request the review again. Any subsequent revisions follow the same procedure.

Table of steps and time tables for presentations

<i>Category</i>	<i>Action</i>	<i>Time Period</i>
Invited Presentations at Conferences or Seminars and Colloquia	Ask P&P approval for invitation by e-mail	When invitation is received Skip this step for seminars and colloquiums
	Post abstract in DCC, request P&P review	At least 2 days prior to submission deadline
	Upload presentation to DCC and request P&P review	Conferences - at least 1 week prior to presentation Seminars and Colloquiums – when ready and in reasonably final form
Contributed Presentations	Post abstract in DCC, request P&P review	2 days prior to deadline; 4 days for major conferences
	Upload presentation to DCC and request P&P review	1 week before presentation