DESI Publication Policy

Version v1.0
Approved by IB, November 20, 2016

This Publication Policy describes the basic expectations and publication policies for the DESI Collaboration. Section 19 of the Collaboration By-Laws discusses Publications. In particular, it defines a Publication Board to oversee the Publication Policy and process. Notably:

"The Spokesperson will convene a Publications Board, which will draft a publication policy that addresses the Model Collaboration Principles. Publications will be subject to internal review for quality, content, and authorship. The Publications Board will maintain this document and will be responsible for executing or delegating any procedures spelled out in it. The Institutional Board will review and ratify."

"The Publication Board, whose members are nominated by the Spokesperson and approved by the Institutional Board for a one-year, renewable term shall be responsible for establishing policies and implementation for DESI publications, authorship, and review.. . . "

The DESI Collaboration seeks to afford recognition and visibility to both the people most immediately involved in each science analysis and those who have worked over years on DESI construction and operations. We further want to ensure that our scientific and technical publications are carefully prepared and of high quality and that our members are able to engage in research and publication in an open and effective manner. Finally, we want to give appropriate recognition to the institutions and agencies that have funded and supported the survey.

This Publication Policy replaces the earlier "Publication Principles" document on which it is based.

1 Introduction

The Publication Policy will apply to all papers using collaboration or project non-public resources. This obviously includes unreleased data, but also DESI simulation products, hardware/software engineering designs and outcomes, working group code bases, etc. The Collaboration may need to write additional policies regarding the intellectual property or licensing of code developed by the working groups.

This policy applies to all forms of communication beyond the DESI Collaboration of DESI scientific results and data, including oral, electronic, and print forms, but excluding press releases and press conferences. The Institutional Board will develop separate policies for press releases and press conferences. Policies for conference presentations, posters, seminars and colloquia will be developed by the DESI Speakers Bureau.

The DESI Collaboration will provide several public data releases. Any work based entirely on publicly available data does not fall under the DESI Publication Policy. However, the Publication Policy does apply to papers that began development when key information was non-public or that use codes or simulations developed using DESI resources.

Responsibility for oversight of DESI publications shall rest with the DESI Publication Board. As defined in the Bylaws, members of the Publication Board are nominated by the Spokesperson(s) and approved by the Institutional Board. The Publication Board is tasked, along with

the Spokesperson(s), with ensuring that the policy is efficiently implemented to the benefit of the Collaboration.

To clarify jargon: **Collaboration Participants** are faculty and senior research staff who join DESI by MOU or formal letter with the approval of the Membership Board. The Participants sponsor students and post-docs at their institutions. **Collaboration Members** refer to the Participants and those they sponsor. For the purposes of the Publication Policy, it also includes approved external collaborators.

Abiding by the terms of the Publication Policy is one of the responsibilities of all DESI Collaboration Members. Violations or perceived violations of this policy should be brought to the attention of the Spokesperson(s), the DESI Project Director, the Publication Board chair, the DESI Ombudsperson(s), or the Institutional Board chair. If they determine that a violation has occurred, they may recommend a course of action to the Institutional Board, depending on the egregiousness of the violation. Particularly egregious or repeat violations may result in loss or curtailment of co-authorship rights, data access, or collaboration membership.

2 Projects

2.1 General Aspects of Projects

Projects are focused, fixed-term analyses, yielding one or a few closely related and nearly simultaneous papers. For example, the same analysis repeated on later data sets will be a separate project. Collaboration Members are expected to conduct their science analyses in an open manner within the collaboration, generally within one or more WGs, and to be welcoming to colleagues who wish to contribute. DESI members are entitled to work on any science topic within DESI.

As soon as a specific scientific investigation begins, the project description should be developed and then announced. Projects can be proposed by any Collaboration Member. The project description should be specific, reporting the subject matter, project leader, known collaborators, a contact person, and the anticipated duration of the project and include a brief abstract of the intended project. The project description must include sufficient detail about the analysis plan and project scope in order for the Collaboration to identify potential conflicts with student theses, Key Projects, and other projects. The proposers should post a draft of the project description to the relevant WG mailing list(s) and discuss it with those chairs, prior to the formal announcement. This is intended to help identify conflicts with existing projects and should that be the case, to explore if the proposed project can be adjusted to avoid these. It also can help to improve and sharpen the project description. Such refinements reduce the likelihood of concerns or confusion arising later.

After this WG consultation, the proposers submit their announcement to the DESI project database, which will generate an email to desi-general@desi.lbl.gov announcing the new project to the Collaboration. In uncommon cases, a project announcement may still overlap a Key Project or a thesis. The Collaboration is strongly encouraged to raise such concerns within two weeks, and the Spokesperson(s) and relevant WG chairs will work with the proposers to resolve such overlaps, which may require modification of the announced project. It may also happen that a project overlaps another normal (i.e., non-Key) project. This is allowable, but may be inadvertent or avoidable. If such overlap is identified, again preferably within two weeks, then the Spokesperson(s) and relevant WG chairs will work with the leads of the projects to see whether a single collaborative approach is mutually preferred or whether the two leads might prefer to alter one or both project descriptions

in response to the overlap. We expect that in many cases, no overlaps will be identified within two weeks. When this process of identifying and addressing overlaps is completed, the Spokesperson(s) will mark the project announcement as having been approved.

Because the resolution of overlaps is usually a simple process, Collaboration Members are encouraged to continue their work while this routine review is occurring.

Project leads may opt to adjust their project description as the project matures, e.g., because of a substantial change in scope. This should result in a new announcement and opportunity for collaboration review.

The Publication Board will periodically monitor the progress of projects. If a project appears inactive, the project contact and relevant WG leads will be contacted and if the project is no longer active, it will be suspended.

2.2 Key Projects

Key Projects are special in that they are protected from competition within the Collaboration, although it is likely that they will employ multiple algorithms and methods to validate an analysis.

The Spokesperson(s), in consultation with the WG chairs, will propose Key Projects for approval by the Institutional Board. Key Projects must be proposed and approved prior to First Light for those using data from commissioning, science verification and the first data assembly (as defined in the DESI Science Readiness Plan). Key Projects must be proposed and approved prior to the start of data collection for those using data from future data assemblies.

For each data release, Key Projects will center around a small number of Key Papers, with additional coordinated Supporting Papers, all of which enjoy protected scope, as approved in the Key Project definition. Each Key Project will be conducted within one or more WGs, which Collaboration Members are free to join. The WG chairs will endeavor to include all interested Collaboration Members in the activities of the Key Project. The list of approved Key Projects will be available on the Publication Board wiki page.

The setting of this protected status requires a balancing of interests within the Collaboration. It shall be used only for projects a) that require the collaborative effort of numerous people to achieve a top-quality timely product and b) for which the publication of disconnected or conflicting results would be a detriment to the Collaboration. That a result is expected to be "impactful" is not sufficient justification. Further, it is important that designation as a Key Project occur at an early stage in the development of the analysis. We expect that the major cosmology analyses will be examples of Key Projects, as will data releases. However, there will be many other WG-level efforts in which the possibility of conflicting results would not be a substantial detriment to the Collaboration and hence would not satisfy the Key Project standard.

The protected scope of the Key Projects will be clearly defined, so as to allow freer analysis within the Collaboration. Note that the Publication Policy defines paper review mechanisms that apply to all communications (see Section 1) in order to help ensure the veracity of results so it is not necessary that all "major" results be treated as Key Projects just to ensure some level of Collaboration-based quality control.

2.3 Thesis Projects

The Publication Board has the authority to mark projects as being integral to a graduate student thesis (Ph.D. or Masters). This does not automatically protect the topic from internal competition.

As a Collaboration, we must be wary of fencing off too many areas, particularly as papers can have fuzzy edges as regards their content. However, if a second project is posted that appears to be repetitive with a thesis project, the student and advisor can contact the WG chairs and Spokesperson(s) to attempt to reduce the overlap. If this conflict cannot be resolved, then the student and advisor can petition the Publication Board for protection of the core aspects of the thesis paper (and hence a required modification of the second project). Note that the Publication Board is not required to protect all aspects of the thesis project, only to maintain a core publishable portion. This is particularly relevant if the work is critical infrastructure for the project or a working group; in such cases, the needs of the broader group to advance the task must take priority over the individual thesis.

2.4 Release of DESI Data and Catalogs

Because of the organized data releases, to which many collaboration analyses will tie their schedules, it is not permissible for individual DESI science papers to include release of substantial amounts of non-public DESI data without permission from the Spokesperson(s). For example, one cannot in the course of a paper about a stellar mass catalog release the position and redshift of every DESI galaxy. Data about a few objects of detailed study may be published without this permission, as can catalogs of selected classes of objects up to 1000 objects. More extensive catalogs may be required to delay publication until the data release; authors are encouraged to raise these questions to the Spokesperson(s) early so that an appropriate resolution can be found. Appeals will be heard by the Project Director.

In cases where publication of supporting data such as value-added catalogs could negatively affect other efforts in the collaboration, the Spokesperson(s) can limit the scope of the paper or defer submission until the other publications are complete. Coordinated submission is particularly relevant for Key Papers and supporting publications.

3 Publications

3.1 Journal Papers

Scientific results obtained by the DESI Collaboration will be published in scientific journals. We distinguish the following paper categories:

Major results from Key Projects will be published as Key Papers with an alphabetical authorlist (see Section 2). All Data Release papers will be Key Papers, with authorship in alphabetical order. General overview papers, such as those describing the DESI instrument or the DESI survey overviews, will also be classified as Key Papers, with alphabetical authorship order.

There are a variety of other kinds of refereed papers, which the DESI Publication Policy handles identically. Science publications are papers using non-public DESI data, simulation publications present results based on DESI simulations, and instrumentation publications describe DESI technical designs including instrumentation, operations, and software.

The DESI Publication Policy including the DESI authorship rules apply to all publications with external collaborators unless it is superseded by a Memorandum of Understanding (MOU) between the parties involved. These are papers written jointly with other collaborations or those using external data sets.

All DESI publications have to adhere to the Collaboration's data management plan (available at https://desi.lbl.gov/trac/attachment/wiki/PublicPages/datamanplan.pdf). Authors should take care that figures and tables in a paper not be such that the data management plan or the chosen journal's rules would require release of large amounts of non-public catalog information such as redshifts. The target journal will be suggested by the WG chairs for papers from Key Projects and by the lead author(s) for other papers, in consultation with the Publication Board. Page charges for journals will be covered by the Collaboration for the Key Papers (where the authorship is in alphabetical order) and by the authors for non-Key Papers. In Key Papers there will be a generic corresponding author email address, which will be forwarded to the Spokesperson(s). In non-Key Papers the corresponding author(s) will be among the lead author(s).

3.2   Conferences and Seminars

Conference proceedings discussing only published DESI material may be written as single-author paper and do not need to undergo collaboration review. Of course, any co-authors must be given the opportunity to comment on the manuscript. Proceedings using unpublished results shall proceed through the Publication Policy as for refereed papers, including perhaps the expedited process described in Section 4.4. Any proceedings commenting on the status of the DESI project or plans of the Collaboration shall be reviewed by the Publication Board for accuracy.

Conference abstracts, such as those for the American Astronomical Society (AAS) and American Physical Society (APS) meetings and similar meetings in other countries, can use a shorter author list, either a single author or a smaller self-selected list. Similarly, talks and posters at meetings may use a shorter author list. At the permission of the Spokesperson(s), these may attach the phrase "for the DESI Collaboration", but this will typically be reserved for cases of Key Projects, other places of established consensus, or descriptions of the DESI project as whole.

While conference abstracts may indicate that pre-publication results will be included in a talk or poster, the abstract itself must avoid quoting such results. Abstracts commenting on the status of the DESI project or plans of the Collaboration shall be submitted to the Publication Board for review for accuracy. Presenters should discuss with WG chairs whether pre-publication results are expected to be authorized to be shown given the timing of the conference (see end of Section 4.3).

3.3   Press Releases

Section 19.3 of the Bylaws state "Press releases must be approved in advance by the Project Director and Spokesperson(s) to enable agency review when required." Press releases and press conferences are not covered by the Publication Policy. They are handled by the Spokesperson(s) and the Project Director in consultation with a separate committee set up by the Institutional Board.

3.4   Theses

Graduate student participants in DESI are encouraged to author theses based on DESI data as well as instrumentation and algorithmic contributions to the project. If an analysis is to be carried out as part of a student's thesis research, the project announcement (see Section 2) should state that, and the student's supervisor should communicate that to the relevant WG chairs and the Publication Board. As noted in Section 2, efforts will be made to ensure coordination of potentially overlapping analyses.

Theses often contain more detailed discussions of scientific results that have been or will be presented in scientific publication(s) for a journal, and they should reference the DESI publications in which those results appear or will appear. Theses are often completed and defended against a short deadline, before their scientific results are ready for journal publication. In recognition of this, theses are exempt from the DESI publication process and may present previously unpublished or non-public DESI results or results that have not yet been approved for dissemination, provided those results are not submitted for publication to a journal or to an electronic archive, or posted on any publicly accessible website. Exceptions to satisfy university graduation requirements can be granted by the Publication Board. Once the associated science results have been approved by the DESI Collaboration for dissemination, they should be included in a DESI journal publication that falls under the purview of the Publication Policy rules described herein, including authorship rules, the publication process, etc. Once that journal publication is publicly available, the thesis (chapters) containing the (if necessary, updated) DESI results may be posted to the ArXiv or other public sites. Thesis oral defense talks are similarly exempted from the rules of the DESI communication process as defined by the DESI Speakers Bureau. However, other public talks and presentations (posters, etc.) based upon DESI thesis work are subject to the rules established by the Speakers Bureau; in particular, only approved science results shall be shown in those venues. Under special circumstances an exemption can be granted by the Spokesperson(s).

3.5 Books and Review Articles

Publications that are based entirely on published material are not subject to the DESI Publication Policy. Usage of unpublished figures or similar material for books, book chapters or review articles requires approval by the Publication Board.

3.6 Options for Non-DESI Publications

For papers by Collaboration Members that are not subject to the DESI Publication Policy, the authors have the option to ask the Publication Board for a formal review. Comments from the Collaboration, the Publication Board or a review committee should be considered by the authors and replied to in writing. Authors can also request that co-authorship be offered to the DESI collaboration, following the standards of Section 5.

4 Publication Process

All DESI publications shall be internally reviewed prior to public dissemination. Internal reviewing aims to ensure that papers correctly represent DESI, as well as meet the requirements for publication in the peer-reviewed literature.

4.1 Analysis Phase

All work leading to a DESI publication is to be performed in the context of a project as discussed in Section 2. Projects are created at the initiation of the work and must be announced collaboration wide, inviting other DESI collaborators to join. Early and timely announcement of projects is vital to the health of the Collaboration and to maintaining a collegial environment.

The analysis team is expected to make periodic progress reports to the WGs, with technical notes and presentations associated with these reports uploaded to the DESI document archive. These reports are important for broader collaboration involvement and for helping to ensure that concerns about the analysis are identified early enough to be addressed. The WGs are strongly encouraged to maintain documentation regarding the details of analyses so that others in the Collaboration can understand them. Coordination and monitoring of analyses in this phase is the responsibility of the WG chairs.

Key Projects will be subject to a higher level of validation, to be coordinated by the chairs of the involved WG(s). This applies to both alphabetical and first-author papers that may be part of a project. This effort will aim to demonstrate the correctness of the work in an explicit and open manner, through code inspection, cross-comparisons, blind challenges, or other techniques. The validation is under the direction of the WG chairs, but will likely involve substantial delegation. It is acceptable that validators be WG members who have been active in other parts of the Key Project. Before the start of the collaboration wide review (CWR) period, the WG chairs will produce a summary report of the validation activities for the review by the Publication Board, review committee, and the Collaboration.

Authors are expected to cite all DESI supporting and technical papers that are germane to the work being presented. The Publication Board will maintain a list of papers that should be cited when using the DESI data set. Should authors be uncertain as to whether all such citations are appropriate for a given paper topic, they should contact the Publication Board for discussion and a decision.

4.2   Review and Response Phases

When an analysis nears completion, the lead authors (WG chairs for Key Papers) ask the Publication Board to establish a review committee (RC) to prepare for CWR. The authors should discuss the timing of this request with the chairs of the relevant working groups. Authors and WG chairs are encouraged to suggest members of the RC, but the choice of members sits with the Publication Board. The request to establish an RC including suggestions of possible reviewers should be given at least 2 weeks before the desired start of CWR, to give the Publication Board time to converge and to appoint the committee.

The Publication Board will appoint two reviewers before the start of CWR. A third reviewer may be used in unusual circumstances. One will be named chair. The chair is expected to coordinate the review and ensure that it is done in a timely manner. Names of the reviewers shall be announced and posted to the publication archive/database. The Publication Board has the authority to replace or add reviewers as necessary, for example because a reviewer is unavailable to respond promptly.

The request to start CWR comes from the lead author(s). At this point, the paper draft should be of publication quality. The Publication Board in consultation with the RC chair will inspect the manuscript to determine whether the paper is mature enough for CWR. This is not meant to be an opinion about content or correctness, but simply a statement that the manuscript is complete and sufficiently clearly written that a collaboration review will be an efficient use of our communal effort. For Key Projects, the validation report (see Section 4.1) must be similarly ready. Once the paper has been judged ready for a formal review, the RC chair notifies the Publication Board. In a case that a manuscript is judged to be too unclear to enter the CWR, then the RC can serve as a resource to help the authors improve the manuscript. Appeals of a negative judgement should be directed to the Publication Board, following Section 7. However, it is suggested that if reasonable editing cannot resolve an impasse, then the paper should proceed to CWR.

It is expected that justifications for inclusion in the first set of authors (see Section 5.1) should be completed before the start of the CWR, although proposals for later inclusions can be made to the Publication Board.

The Publication Board then circulates the paper to the full DESI Collaboration to start a two-week CWR. During this period, the RC performs a formal review of the paper, producing a written review that will be visible to the full collaboration. The RC will focus on the manuscript itself, with depth comparable to that of a journal peer-review. It is not expected that the reviewers will converse with the authors to inspect code repositories and intermediate tests, but for Key Projects the RC should consider the validation report as well.

All Collaboration Members have the opportunity to submit comments as well, which should similarly be visible to the full collaboration. During this time period, the lead authors can request a paper-centric telecon to be scheduled by the RC chair or their designate where the authors present the results. The telecons are encouraged but optional for standard publications. They are required for all Key Project papers. These telecons are open to the entire Collaboration. Authorship requests are encouraged to occur during the CWR period.

Following the CWR, the lead author(s) will lead the group in making changes, with input from the WG chairs and others as needed. All comments received during the CWR and the authors' responses will be entered in the DESI publication archive. Requests and comments received during the CWR shall be carefully considered by the authors but are not binding. The authors must respond to the RC comments in writing and are encouraged to do so for other comments. Comments and responses will be accessible to all Collaboration Members.

When the lead author(s) believe that they have addressed all comments, they should alert the Publication Board and the RC. The RC chair will judge whether the responses are adequate, consulting with the rest of the RC if needed; this should happen in no more than one week. If the RC agrees, then the paper is brought to a Final Reading period. In most cases, any disagreement between the RC and the authors should be dealt with by iterating until they can achieve consensus. In rare circumstances where this consensus is not reached, the RC will alert the Publication Board and the full author list to their concerns. The Publication Board will then call for a formal vote as to whether the paper is ready for submission. All authors (e.g., including Builders) that have co-signed the paper by the end of the CWR are eligible to vote. It will require a positive vote of more than half of the non-abstaining authors, with missing votes counting as negative, to proceed to the Final Reading period. In this way, if previous consensus cannot be reached, the decision as to whether the RC's objections are correct rests with the full set of authors. The Publication Board and Spokesperson(s) will assist as much as possible in resolving the dispute. It is noted that some authors may opt to remove themselves from the author list, which may itself permit a majority positive vote to be more easily achieved.

4.3 Final Reading, Journal Submission, and Miscellaneous Aspects

The Publication Board will announce to the full Collaboration the initiation of the Final Reading period. This allows Collaboration Members a final opportunity to review the paper, in particular to check if their comments made during the CWR period have been satisfactorally addressed. Any remaining issues will be brought to the attention of the Publication Board. A member of the Publication Board performs a final reading to ensure that the correct supporting and technical papers are cited, the acknowledgements, author list and bylines are correct and that no factually incorrect statements about the DESI project are made. Finally, it is allowable to have additional co-authorship requests. Once these comments have been acted upon by the authors, they may

submit the paper to the archive and the journal. The final reading period shall be limited to one week.

The Publication Board may in unusual cases and with notification extend the CWR or the Final Reading periods, requiring a hold on submission of the paper. We expect such extensions to be rare and reserved for cases where it is clear that important issues raised during CWR are unresolved. Should this situation arise, the authors will work with the RC to address any unresolved issues. Extensions are expected to be two weeks or less. If no solution has been found after two weeks, the authors can petition to the Publication Board to release the paper.

Under special circumstance and for time-critical results, the Spokesperson(s) in consultation with the Publication Board can opt to fast track a paper through the DESI publication processes. Any changes such as a shorter CWR period or reduced time for Builder sign-up must be announced to the Collaboration in a timely fashion.

There are some circumstances by which the Spokesperson(s) can block submission of a paper. 1) If the Publication Board concludes that a paper is misrepresenting empirical aspects of DESI non-public data or methods or is otherwise misstating facts about DESI. Until the data are made public, only the DESI Collaboration has the ability to diagnose the concern, and hence the Collaboration has a responsibility to ensure that the data are being represented accurately. 2) If the Publication Board concludes that a paper is misrepresenting the contributions of Collaboration Members, e.g., by failing to give appropriate credit to internal data products or ideas that are being used. For example, the Collaboration has a substantial interest in assuring its communication instruments, such as email lists, can be used without concern that one's ideas or results will be published by others without agreement. 3) If the paper is in violation of the data release limitations described in Section 2.4. For all of these situations, the Spokesperson(s) also have the right to delay indefinitely the submission of a paper while investigations of such allegations are conducted. Appeal of such decisions will be to the Project Director.

Submission to journals and the archive as well as the journal review process are the responsibilities of the lead author(s). All correspondence with the journal including the referee reports and the authors' response will be recorded in the DESI publication archive. When the lead authors are ready to resubmit a new version of the paper to the journal and/or arXiv, they will notify the Publication Board, whose permission is required. This is expected to be a quick approval in most cases. However, if the Publication Board believes that the revised paper may be newly in conflict with a Key Project or thesis, then it will alert the Spokesperson(s), who will investigate and who may require revisions to avoid the conflict prior to resubmission. Further, if the Publication Board, possibly in consultation with the RC, believes that the content of the revision has changed enough that the prior review is not sufficiently applicable, then it may reconvene the RC and initiate a new two-week collaboration review, response, and final reading cycle, exactly equivalent to the original submission.

Material from non-public papers can be used in public presentations only with permission of the relevant WG chairs, or the Spokesperson(s) should the chairs be heavily conflicted (e.g., in the case of Key Papers). Applicants should allow adequate time for this consideration and approval. Permission will typically be withheld until the paper has completed the CWR period, but the WG chairs should exercise judgement about the sensitivity of the result. Some results may need to be embargoed until publication. Any material so used should be clearly marked as "Preliminary", and the WG chairs may ask for parts of plots to be redacted so as to conceal portions of the result.

4.4 Expedited Procedure for Conference Proceedings

The Publication Board has the option to approve an expedited procedure, following application from the authors. This is intended for conference proceedings and equivalent documents that will include collaboration proprietary information and results, but that are not presenting material that requires as high a level of scrutiny from the Collaboration and its internal referees. For example, one might be presenting pre-publication supporting plots but not the core quantitative results, or one might be presenting technical information of a factual nature that doesn't require extensive review. Proceedings that seek to present science results that will be featured in a future collaboration paper will not typically be approved for expedited treatment; this is in large part to discourage such proceedings, as they tend to obscure the priority of the paper and expedition would tend to limit co-authorship and minimize the collaboration review of the result.

The expedited procedure will involve one Publication Board appointed reviewer and a one-week CWR, during which the Publication Board will also review the manuscript. We expect the Response to be rapid in such cases, following which the Publication Board can authorize submission. Authorship justifications (see next section) should be available at the start of the CWR, and all additional coauthorship requests should happen during the CWR.

Conference proceedings that do not include proprietary collaboration information, e.g., because they draw only from published sources, are not required to use the Collaboration publication procedures.

5 Authorship

5.1 Authorship and Ordering

The DESI Collaboration will follow the authorship and citation policies set forth by the American Physical Society, reproduced in Appendix A.

With the exception of Key Papers, DESI authorship will typically follow a two-set, first-author model. Those authors most immediately engaged with the science analysis or technical development presented will be in the first set, in an ordering agreed upon by these authors. All other authors will be in an alphabetically-ordered second set. We expect that most DESI publications will include a fair number of co-authorships from Builders. Anyone who has been placed on a paper's author list may make a request to the paper's team contact at any time before the paper is submitted to the archive and/or a journal that her or his name be removed from the paper and it shall be removed.

Inclusion in the first set of authors will require a substantial investment of time (e.g., several weeks of effort, or consistent detailed advising of the lead junior author) on that specific paper. We note that activity in a working group does not itself justify inclusion in the first set of authors, nor does providing comments on an advanced draft of the paper. Written justifications for inclusion in the first set must be provided by each author in the first set to the Publication Board for their approval. In this manner, the Publication Board can help to maintain an appropriate balance between the need to give incentives and credit for non-first-author work on science analyses and the need to give adequate credit to the Builders and other Members who have contributed greatly to the DESI data set.

Key Papers will have strictly alphabetical author order. These papers can be said to represent the DESI Collaboration. Key Papers will be referred to as DESI Collaboration when referenced by other publications, e.g. DESI Collaboration 2018b, will include the footnote "DESI Collaboration

Key Paper"

Co-authorship requires "opt-in" action from the author, i.e., the Collaboration will not maintain a standing list of authors to be automatically attached to papers.

5.2 Builders

DESI Builders will be those who have significantly contributed toward Project and Collaboration service. Members will be designated as Builders following a separate policy defining the criteria and application process; this policy will be formulated by the Membership Committee and approved by the Institutional Board. Builder status gives rights to request co-authorship on any DESI paper.

5.3 Authorship Requests from other Collaboration Members

Collaboration Members who are not Builders can request co-authorship only on papers that they have substantively impacted, e.g., through significant contributions relevant to the science analysis. For Data Release and General Overview papers, which are intended to inclusively represent the Collaboration's efforts toward the experiment, any notable contribution to the Collaboration, e.g., 1 month of DESI service work, is sufficient for co-authorship. Requests should follow the APS authorship standard in Appendix A. Note that simply giving comments on an advanced draft of a paper is not sufficient. Working Groups may opt to define sets of related papers as being under a common umbrella for this purpose.

There will be a mechanism by which members provide a justification for their authorship, to be reviewed and approved by the Publication Board; these justifications will be public within the Collaboration. The Publication Board will offer guidance as to what constitutes sufficient justification.

5.4 External Collaborators

The Collaboration will develop a separate policy to define mechanisms to involve External Collaborators, non-collaboration members who will be brought on for a single project (at most a small set of papers). Once approved for a project, External Collaborators will follow the same authorship procedures and standards as other prospective (non-Builder) co-authors.

6 The Publication Board

The DESI Publication Board will be a standing body charged to administer the Publication Policy and guide papers to publication. It is not the primary instrument for the scientific management and publication strategy of the Collaboration; those tasks fall to the Spokeperson(s).

Key activities for the Publication Board will be:

1. Oversee the internal review of publications and conference proceedings prior to their submission.

2. Appoint internal review committees for analyses nearing completion.

3. Approve authorship for each paper, including for inclusion in the first set of authors, based on the submitted justifications.

4. Resolve requests for the protection of thesis projects, upon request from the lead authors or the thesis advisor.

5. Maintain a list of the supporting and technical papers that should be cited in all DESI publications and be responsible for any waivers of this rule.

6. Perform a final reading of journal papers to make final editorial comments and to ensure that all DESI publications and communications include the proper references to DESI technical publications and the standard DESI acknowledgement discussed in Section 8.

7. Review responses to journal referee reports.

8. Develop amendments to the Publication Policy itself, as need arises.

The Publication Board shall also maintain the Collaboration Publication Archive. The Publication Archive shall include all project and publication announcements as well as records of the collaboration and journal reviews.

7 Appeals Process

The Publication Board serves as arbiter in publication-related disputes. In case of disagreements regarding authorship ordering and authorship requests or if conflicts arise during the review process, any Collaboration Member may ask the WG chairs for help resolving the issues. Should the outcome be unsatisfactory to either party, an appeal can be made to the Publication Board and then finally to the Spokesperson(s). The decision by the Spokesperson(s) is binding.

Collaboration Members are reminded that the DESI Ombudspersons are available to help mediate disputes.

8 Standard DESI Acknowledgements

All DESI publications, including scientific and technical journal publications, conference proceedings, and theses using DESI data, must include the standard DESI acknowledgement. The standard acknowledgement text has been agreed to and may be updated by the Institutional Board. The acknowledgment text will be available on the Publication Board wiki page.

9 Amendments

Amendments to the Publication Policy can be proposed by any Collaboration Member. The proposed changes will be discussed by the Publication Board. A recommendation will be forwarded to the Institutional Board, which will vote on the amendment.

10 Appendix A: Authorship Guidelines

In general, the DESI Collaboration will adhere to the American Physical Society Guidelines for Professional Conduct, found at `http://www.aps.org/policy/statements/02_2.cfm`.

Relevant portions from the **APS** document include:

"Authorship should be limited to those who have made a significant contribution to the concept, design, execution or interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors. Other individuals who have contributed to the study should be acknowledged, but not identified as authors."

"All collaborators share some degree of responsibility for any paper they coauthor. Some coauthors have responsibility for the entire paper as an accurate, verifiable, report of the research. These include, for example, coauthors who are accountable for the integrity of the critical data reported in the paper, carry out the analysis, write the manuscript, present major findings at conferences, or provide scientific leadership for junior colleagues."

"Coauthors who make specific, limited, contributions to a paper are responsible for them, but may have only limited responsibility for other results. While not all coauthors may be familiar with all aspects of the research presented in their paper, all collaborations should have in place an appropriate process for reviewing and ensuring the accuracy and validity of the reported results, and all coauthors should be aware of this process."

"Every coauthor should have the opportunity to review the manuscript before its submission. All coauthors have an obligation to provide prompt retractions or correction of errors in published works. Any individual unwilling or unable to accept appropriate responsibility for a paper should not be a coauthor."