Bylaws of the K-long Facility (KLF) Collaboration

A Membership (Adopted: September 19, 2023)

Membership to the KLF Collaboration is granted to individual institutional groups by the Collaboration. Each such group should appoint a group leader who is responsible for interacting with the KLF management throughout the membership process. The group leader then becomes the point of contact for the collaboration on all issues regarding the contributions of the group to the experiment and is responsible for notifying the KLF management of changes in the institutional group's membership (e.g., the addition of postdocs or graduate students). The group has the right at any stage to appoint a new or replacement group leader who is then obligated to ensure that the group's commitments to the experiment are fulfilled.

A.1 Election of Members

- 1. The group leader will work initially with the Spokesperson and Hall D Leader to identify areas where the institutional group may contribute.
- 2. To join the collaboration, the group leader should submit a Letter of Intent (LoI) to the Spokesperson. The letter is expected to outline:
 - the physics interests of the group,
 - the available resources and manpower, including the anticipated percentage of a full-time equivalent person (%FTE) for each contributing member, and
 - o expected responsibilities and contributions to the experiment.
- 3. The Collaboration Board and Executive Group will review the LoI, consulting with the group leader as necessary.
- 4. The Collaboration Board recommends membership to the Collaboration.
- 5. The Collaboration votes on the membership of the institutional group. Two-thirds vote is required for approval.
- 6. The group becomes a member.

A.2 Removal of Members

There are two ways that an institutional group can be removed from the Collaboration:

- 1. The group leader notifies the Spokesperson of his or her group's intent to withdraw from the Collaboration.
- 2. An institutional group can be removed by a vote of the Collaboration if the group is determined (i) to have failed to fulfill their institutional obligations to the experiment or (ii) to have been inactive for a period of at least two years.
 - The request for removal is brought before the Collaboration Board by the Spokesperson or Deputy Spokesperson after having concluded either of the two criteria for removal apply.
 - The Collaboration Board evaluates the request and makes a recommendation for a Collaboration vote on the issue.
 - The Spokesperson notifies the institutional group leader that the Collaboration Board has recommended a vote on the removal of the group.
 - The group leader has a minimum of sixty days to respond to the recommendation of the Collaboration Board before the issue moves to the Collaboration for a vote. During this time the Collaboration Board may withdraw its recommendation.
 - The recommendation is voted on by the Collaboration. Two-thirds vote is required to remove the group from the Collaboration.

B Voting (Adopted: September 19, 2023)

All issues requiring a vote of the full Collaboration must adhere to the following guidelines.

- 1. Ballots shall be distributed and submitted electronically in a way that allows anonymous access to the ballot by all collaboration members regardless of geographical location.
- 2. Every person who is a member of the Collaboration at the time the ballot is opened is eligible to participate in the election.
- 3. Ballots shall remain open for a minimum of two weeks or ten business days (whichever is longer) after the initial announcement is distributed to the collaboration.
- 4. Unless otherwise specified, "two-thirds vote" or "majority vote" implies two-thirds or a majority of those who cast a vote. An abstention does not count as a vote.
- 5. No election result is valid unless a quorum of the Collaboration participates in the election. An eligible voter may participate in an election but not vote by using the electronic ballot to register his or her abstention.

6. A quorum is defined as more than 50% of eligible voters.

C Modification of Bylaws (Adopted: September 19, 2023)

The following procedure shall be used to modify or amend these bylaws.

- 1. Any collaboration member wishing to initiate a modification of or amendment to the bylaws should notify the chair of the Collaboration Board of his or her intent.
- 2. The Collaboration Board will discuss the request and, if it determines that modifications are necessary, draft a revision of the bylaws.
- 3. Revisions to the bylaws must be approved by a two-thirds vote of the Collaboration.

D Acquiring Data (Adopted: September 19, 2023)

While the initial period of beam in Hall D will be dedicated to commissioning and running with the base Hall D equipment, it is expected that additional experimental proposals for Hall D beyond the primary KLF physics program will be made. Additional proposed experiments in Hall D which use any portion of the Hall D detector equipment may seek the endorsement of the KLF Collaboration.

D.1 KLF Collaboration Endorsement

- 1. KLF-endorsed experiments are recognized as distinct experimental directions being pursued under the organization of the KLF Collaboration.
- 2. The endorsement of the Collaboration implies a commitment of the entire Collaboration to operate detector equipment, staff shifts, and calibrate and process the data collected.
- 3. All proponents of such proposed experiments must be members of the KLF Collaboration, or have a plan approved by the EG and CB for joining the Collaboration and participating in ongoing KLF experiments.

D.2 Experimental Proposal Endorsement Process

1. The experimental proposal endorsement process should begin with a discussion between the KLF Spokesperson, Hall D leader, and proposal proponents, and may include a presentation to the Collaboration.

- 2. The proponents are expected to prepare a document that describes the necessary modifications to configuration of equipment, needed running time, and expected physics impact. This document is referred to as "the proposal" in the bylaws that follow. The responsibilities of member groups for detector operation and calibration should be clearly specified. This information must be presented to the Collaboration, either at a Collaboration Meeting or at a meeting of the Physics Working Group.
- 3. The evaluation of the technical feasibility and physics merit of the proposed experiments will be coordinated by the Collaboration Board, in consultation with the Hall D Leader. The CB will be responsible for designating at least one and no more than three internal reviewers for each proposal.
- 4. The internal reviewers should receive a draft of the proposal to review no later than 90 days before an eventual vote by the collaboration. The reviewers are expected to interact with the proponents of the proposed experiment and may request revisions or additions to the proposal to complete their review.
- 5. After review, the committee will prepare a written response to the charge of the CB that includes a recommendation on whether the proposal is appropriate to be considered for endorsement by the Collaboration. The evaluation of appropriateness should be based on a variety of factors including technical feasibility, physics merit, completeness of the proposal as well as considerations of the schedule and required commitment of the Collaboration. The committee report will be communicated to the proposal proponents and be made available, along with the proposal, to the members of the Collaboration. The EG and CB shall then decide if the proposal will be put up for a vote, which should be initiated no less than 30 days from this decision.
- 6. The proposal must be approved by a vote of two-thirds of the Collaboration.
- 7. In exceptional cases, a proposal may be put up for a vote at any time by the KLF Spokesperson and Hall D Leader.
- 8. If a proposal is not put up for a vote or does not pass the vote for endorsement, the proponents may revise and resubmit their proposal for consideration.

D.3 Access to Data

 Data taken during any run period or Hall D detector configuration of a KLFendorsed experiment may be analyzed by any member of the KLF Collaboration.

- 2. Members of the Collaboration shall inform the Physics Analysis Coordinator of their intent to analyze data to maximize efficiency.
- 3. KLF welcomes discussion with non-member theorists. Non-member theorists may be given access to internal KLF data only after approval of the Physics Analysis Coordinator in consultation with the Collaboration Board. KLF data may only be published or shown publicly in accordance with KLF bylaws.

E Shift-Taking (Adopted: September 19, 2023)

E.1 General Policies

- 1. KLF running periods are supervised by a Run Coordinator (RC) who is responsible for day-to- day and week-to-week operations. An RC serves for at least one week at a time.
- 2. KLF shifts are always manned by two people, one shift Leader and one shift Worker. Leader shifts are recommended to start at 00:00, 08:00 and 16:00 and worker shifts start at 04:00, 12:00 and 20:00. In the future, it might be desirable to assign different weights to these shifts.
- 3. Each member of KLF is encouraged to take shifts. Each collaborating institution has a contact person responsible for filling all shifts assigned to that institution. The assigned shifts to an institution are evenly distributed over the different day and night shifts. The method for choosing shift personnel is left to the discretion of the contact person and his or her institution but must conform to the overall guidelines described here.
- 4. This by-law only deals with general shift-taking concerned with experimental data-taking. It does not deal with specialized shift-taking concerned with a particular detector or software element, nor with any other activity performed by collaboration members in fulfillment of their MOU's or physics program.
- 5. This general policy is subject to change for engineering runs.
- 6. Collaboration membership and authorship issues are addressed in the corresponding by-laws on membership and authorship.

E.2 Shift Taker's Qualifications and Conduct of Operations

1. All shift takers must meet certain criteria itemized here. Prior to taking his or her first-ever scheduled shift, a person must be an observer on at least one shift to become familiar with procedures and (typically) to finish reading the required documents listed in the COO. In addition, anyone participating in data taking with KLF must have a level of safety and radiation training

- described in the document ``Conduct of Operations for Hall D Base Equipment Commissioning'' (COO) [https://www.jlab.org/Hall-D/safety-docs/current/COO.pdf] document. It provides an authoritative discussion of shift operations, including the duties and responsibilities of the shift Leader and the shift Worker.
- 2. "Leaders:" The list of expert shift takers who can act as shift leaders is determined by the Physics Division Liaison (PDL) in consultation with the Hall D Collaboration Executive Group, which is responsible for the safe and effective operation of the system. Shift Leaders must be KLF Collaboration members. Leader status implies experience in running KLF shifts, not necessarily expert knowledge of hardware and software components of the system. Oral communication skills that enable effective communication with the accelerator staff are required for shift leaders. The Physics Division Liaison (PDL) must be satisfied that any given shift leading expert has adequate language skills.
- 3. "Workers:" All members of the KLF Collaboration are eligible for worker shifts. Non-members, including new graduate students, may be assigned shifts by the institutional contact person supervising the filling of the shift schedule. By assigning shifts to non-members, an institution's contact person is certifying that the persons so assigned will have met the Worker shift taker's requirements by the time the shift starts.
- 4. The PDL has the authority to reject a person for a shift if he or she thinks that the person is unqualified. The relevant institution then has responsibility for finding a suitable replacement.

E.3 Shift Scheduling and Shift Counting

- 1. The collaboration Shift Scheduler will revise the membership list of the collaboration maintained by the Collaboration Board (CB) at each collaboration meeting.
- 2. Shifts will be assigned in blocks to all member institutions in proportion to their number of members. A shift-trading period will be organized by the Shift Scheduler to allow foreign, domestic, and local institutions to optimize their periods of shift-taking responsibility to their needs.
- 3. For any individual collaborator there can be no less than 12 hours between the end of one shift and the beginning of the next. Exceptions may be granted by the PDL.
- 4. The activity of the RC `counts' toward the shift responsibilities for the RC's institution at the rate of one shift per day.

- 5. If a shift goes unfilled, either by no-show or no-qualify, the incident will be brought to the attention of the Collaboration Board for possible action.
- 6. Under exceptional circumstances, the shift scheduling and shift counting for an institution will be revised by Hall D Collaboration Executive Group.

F Publications (Adopted: September 19, 2023)

F.1 Review Process and Collaboration Approval

- 1. Any paper that reports results based on Hall-D KLF data requires the approval of the KLF Collaboration before publication.
- 2. The proponents of a paper will prepare a technical note of the analysis and a draft of the paper that contains all proposed figures, tables, and physics results. These shall be submitted to the Physics Analysis Coordinator with a request for review and a proposal of the target journal.
- 3. The Physics Analysis Coordinator will appoint a committee of three Collaboration members (the ``Review Committee'') not directly involved in the analysis that will review the submitted documents and assist the proponents in the approval process. A deadline shall be specified for the review process.
- 4. If the Review Committee determines the paper is ready for publication, its Chair will make a presentation to the relevant Working Group that summarizes the physics results and conclusions. Following the presentation, the relevant Working Group will vote on proceeding with the publication and submitting the paper draft as well as supporting documentation to the whole Collaboration for review.
- 5. In case of disputes, the Physics Analysis Coordinator in consultation with the Collaboration Board will decide how to proceed.
- 6. After approval of the Physics Working Group, a complete draft of the paper including a list of all eligible authors and all proposed additional non-KLF members to be included in the author list will be made available to the KLF Collaboration. All comments and suggestions shall be addressed to the proponents of the paper and the Review Committee. A deadline will be specified for responses. Eligible collaboration members can "opt-out" and assert their wish not to co-author the paper.
- 7. Any disapproval of the paper by Collaboration members shall be communicated to the proponents of the paper, the Review Committee, and the Physics Analysis Coordinator.

- 8. The proponents may withdraw their paper, or the Review Committee may withdraw its recommendation for publication at any time before final approval.
- 9. Approval for publication will be granted by the Physics Analysis Coordinator once the proponents of the paper and the Review Committee have addressed all comments from the Collaboration members and the final author list of the paper has been made available to the KLF Collaboration. At the discretion of the Physics Analysis Coordinator, the paper will be subject to an additional Collaboration review.
- 10. If at any time during the review process a dispute arises, the Collaboration Board will make a final decision on how to proceed with the publication.

F.2 Authorship

- All current KLF Collaboration members are eligible for co-authorship. A new member is eligible after a probationary period that is decided by the institutional group leader but expected to be six months. In the case of a new group, the duration of the probationary period is decided by the Collaboration Board. During this time, commitment to KLF must be demonstrated.
- 2. Members who leave the KLF Collaboration will remain eligible for authorship on KLF papers for one year following their departure.
- 3. After one year following the departure of a Collaboration member, the leader of his or her former institutional group shall decide whether the individual will be eligible for co-authorship and communicate the name to the Collaboration Board, which reserves the right for a final review.
- 4. A paper will carry the names of all co-authors in alphabetical order. A footnote will identify the corresponding author(s).
- 5. The proponents of a paper will initially propose which non-KLF members shall be included on the author list and communicate those names to the Collaboration Board for approval.
- 6. Any late additions to or removals from the author list must be approved by the Collaboration Board and communicated to the Collaboration.
- 7. In case of disputes, the KLF Collaboration Board will make final decisions on authorship.

G Officeholder Succession Rules (Adopted: September 19, 2023)

- 1. The term of the Spokesperson shall begin and end on September 1, following elections during or after the Spring Collaboration meeting.
- 2. If the Spokesperson resigns in the middle of a term, the Deputy Spokesperson becomes interim spokesperson, until a new election can be organized by the Collaboration Board.
- 3. If the Deputy Spokesperson resigns in the middle of a term, the Spokesperson initiates a search for a new deputy in accordance with the Management Plan.
- 4. If both Spokesperson and Deputy Spokesperson resign at the same time, the Collaboration Board must name an interim spokesperson and an interim deputy spokesperson within two weeks. Then an election for spokesperson should be initiated, supervised by the Collaboration Board.
- 5. If a Collaboration Board member resigns in the middle of a term, then the Board operates with one fewer member throughout the remainder of that person's term.
- 6. If two or more Board members resign creating multiple vacancies, then the Spokesperson appoints interim board members to temporarily fill the empty seats. An election to fill out the remaining vacant terms is initiated for these seats within two weeks.
- 7. If a member of the Board serves for less than one year of the full two-year term, the partial term will not count toward the two-consecutive-term limit specified in the Management Plan.