

## DUNE Co-Spokesperson Election Procedures

March 6, 2017

The following is the list of procedures followed by the DUNE Co-Spokesperson Search Committee (CSSC) in the 2017 DUNE election. Details on the preferential voting system are provided in Appendix A. Specifics from the 2017 election are given in Appendix B along with some additional suggestions for the next committee.

- 1) An email listserv was established to facilitate communication to and amongst CSSC members ([dune-cssc@fnal.gov](mailto:dune-cssc@fnal.gov)). List membership included the committee members and the DUNE program administrator. The list is owned and maintained by the chair of the committee.
- 2) The committee held the first meeting to discuss election procedures, decide on the chair of the committee, and agree on next steps.
- 3) An email was sent to the collaboration initiating the election procedures, providing a timeline for the process, and requesting that collaborators send in up to 3 nominations. Two additional reminder emails were sent out, including one on the last day of the nomination period. Nominations were sent to the [dune-cssc@fnal.gov](mailto:dune-cssc@fnal.gov) email list and collated by the DUNE program administrator. The DUNE Institutional Board was informed of the number of nominators and nominees after the nomination solicitation period closed.
- 4) The committee met to discuss what qualities were most important for the next DUNE co-spokesperson given the needs and present stage of the experiment. This list of criteria was agreed to by the committee and formed before any names of nominee were discussed. It is recognized that this list of criteria will, of course, change as the experiment evolves. This list of criteria was distributed in the minutes to committee members after the meeting.
- 5) The DUNE program administrator provided the list of nominees to the committee. The list was additionally cross checked by a committee member. In a scheduled meeting, the committee discussed the nominees. Nominations could also be made by committee members, if they chose to do so, following the same rules and deadlines as the rest of the collaboration.
- 6) Committee members were assigned to contact each of the nominees to notify them that they had been nominated and to ask if they would be willing to continue in the process. Every nominee receiving 3 or more nominations was contacted. Contacts were made in person or by phone. This was an extended conversation with the nominee, not a quick “yes/no” phone call. Names of the nominees and those wishing to continue in the process were not released outside the committee, a decision made by the committee.

- 7) With a list of candidates willing to continue in the process, the committee met to discuss the interview process. The committee established an interview schedule and formed a list of interview questions. The basis for the questions was the criteria previously determined in step (4).
- 8) The committee as a whole interviewed each of the candidates. An hour was scheduled for each interview and the same set of questions was asked of each candidate. At the end of each interview, the committee met privately and committee members were asked to give their impressions. Detailed minutes were provided by the DUNE program administrator so that the committee could refer back to the interview answers provided by each candidate. The chair of the DUNE Institutional Board was informed of the status of the process at this stage, namely that the interview stage had completed.
- 9) At the conclusion of the interview process, the committee formed a final list of candidates in preparation for the ballot phase following our charge to “produce a short list (nominally comprised of three candidates) which will be presented to the collaboration for a general election” [1]. The committee was given an additional 3 days to think about the list and met again to discuss our decision the following week. At this stage, the chair of the committee made contact with the director of the host lab for input, as per the DUNE bylaws.
- 10) Short list candidates were contacted by the committee chair and given time to decide whether or not they would run for election. Candidates who were not put forth on the ballot were informed of the committee’s decision by the committee chair after the short list candidates had agreed to run for election.
- 11) The voting machinery was set up in Indico by the DUNE program administrator and tested by the committee. Both the email to the collaboration and the ballot explicitly indicated the rules for the election. In addition, candidates were asked to provide a photograph, bio, and brief statement for the ballot. The Indico site was set up to not collect any votes after the stated deadline.
- 12) An email was sent to the collaboration announcing the ballot and providing voting instructions and deadlines. The chair of the Institutional Board was notified before the email was sent out. Collaborators were given 2 weeks to vote. Two email reminders were sent out, including one on the last day of voting. As per the DUNE bylaws, “any PhDs or equivalent, engineers and graduate students” who have been the members of the DUNE collaboration for at least 1 year prior to the election opening date were eligible to vote [1].
- 13) The DUNE program administrator provided the committee chair with a spreadsheet of collaboration members and their start dates, from which voter eligibility could be determined.

- 14) As per the DUNE bylaws [1], a preferential voting system was used. See Appendix A. The chair of the previous DUNE election committee was additionally consulted beforehand to confirm the voting rules. Voters were asked to rank each candidate with a number from 1 to  $n$  ( $n$  being the number of candidates), with 1 being the highest ranking. Voters were instructed not to use the same number more than once. Voting rules were articulated in the email to the collaboration and on the ballot itself.
- 15) Votes were tabulated by the chair of the committee and independently cross checked by the DUNE program administrator and an outside party.
- 16) At the close of the voting period and after votes had been counted, the committee was informed of the election results. Second, the candidates were phoned to notify each of them of the results. Third, the chair of the Institutional Board, DUNE co-spokesperson, and host lab director were informed before the official announcement was sent to the collaboration.

This document was prepared by the 2017 DUNE CSSC,

*Sergio Bertolucci*  
*Yannis Karyotakis*  
*Kam-Biu Luk*  
*Marvin Marshak*  
*Alfons Weber*  
*Sam Zeller (chair)*

## **References**

[1] Section 4.2 “Election Procedure and Terms” of the DUNE bylaws (docdb #1).

## **Appendix A: Preferential Voting System Rules**

- Step 1: Ineligible voters are identified and removed from the list of votes.
- Step 2: The number of first preference (#1) votes that each candidate received is counted.
- Step 3: If a candidate receives a majority (> 50%) of the first preference votes, then the election ends at this stage and that candidate wins.
- Step 4: If no candidate receives > 50% of the first preferences votes, then the candidate with the fewest first preference votes is eliminated and their (#1) votes go to the candidate that each of those voters ranked next (#2).
- Step 5: The process continues until one candidate gets 50% or more of the votes. That candidate is then the winner of the election.

## **Appendix B: Specific Details from the 2017 Election**

- In the 2017 election, over 80 collaborators sent in nominations. One nomination was sent in by an institution rather than by each of the associated individuals, hence requiring additional follow-up.
- A total of 35 people were nominated, of whom 17 had the requisite number of 3 or more nominations from the collaboration.
- Roughly  $\frac{1}{2}$  of the nominees decided to continue in the process and were interviewed.
- The interview process was made easier by the fact that interviews were conducted during a DUNE collaboration meeting and hence most of the interviews could be conducted in person. The committee was present for each of the interviews.
- The 2017 ballot consisted of 3 candidates. The committee was unanimous in the decision of who should be on the ballot. The host lab director affirmed the ballot formed by the committee.
- Indico was used to collect votes. Indico worked well and is highly recommended for use in future DUNE elections.
- In the 2017 election, 3 collaborators sent their votes to the chair of the committee rather than using the ballot form on Indico. Each of these voters were contacted and asked to submit their votes on Indico.
- A total of 375 people sent in votes. Out of this number, 345 were eligible voters, 30 were ineligible.
- Voter eligibility was defined as anyone who had joined the DUNE collaboration prior to February 16 (of the prior year), the date that voting started. Eligibility was independently confirmed by both the DUNE program administrator and the chair of the committee. In one case, the Institutional Board chair was contacted to confirm the eligibility of a voter who was not associated with a DUNE collaborating institution.
- In the 2017 election, all three independent tabulations of the voting results agreed with each other upon the first comparison.
- The election process was completed in 10 weeks. The process started on December 23, 2016 and was completed on March 3, 2017. The committee

held multiple meetings and had frequent email exchanges throughout this 10 week period.

#### Timeline Followed for the 2017 Election:

- ✓ 3 weeks: nominations solicitation
- ✓ 1 week: committee contacted nominees with 3 or more nominations to produce an initial list of candidates willing to continue in the process
- ✓ 1 week: committee interviewed all candidates from prior step
- ✓ 2 weeks: committee produced a short list and confirmed that these candidates were willing to stand for election
- ✓ 5 days: candidates prepared and posted their photo, statement, and bio
- ✓ 2 weeks: voting period
- ✓ 1 day: votes tabulated and cross-checked
- ✓ 1 day: candidates contacted and new co-spokesperson announced

#### Additional Suggestions for the Next Election Committee: (beyond the procedures outlined above)

- The nomination period could be reduced from 3 weeks to 1-2 weeks. Most of the nominations were received in the last few days of the nomination period.
- At the nomination stage, collaborators should be explicitly reminded in the solicitation email that nominations should be sent by individual and not by institution.
- The 2 week period for preparation of the ballot should be extended by at least an additional week to allow for conversations that candidates may need to have with others before agreeing to run for election (e.g., this includes discussions candidates may need to have with department chairs, lab directors, program managers, DUNE management, etc.).
- For the 2017 election, we had the benefit of being able to interview candidates during the DUNE collaboration meeting when we were all in one place. Future election cycles might want to accommodate more than 1 week for interviews if the schedule does not span a collaboration meeting.