

Survey of Membership Policies

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Member definitions

General Comments about DES, DESI, LSST, IceCube, Mu2e, DESC

Forming/Joining the collaboration: Simple Example

Two concepts that may be added: External Collaborator, Builder

Links

https://www.darkenergysurvey.org/wp-content/uploads/2016/05/membership_policy_revised-Dec-2011.pdf

http://lsst-desc.org/sites/default/files/DESCMembershipPolicy2015_v6.1.pdf

https://docushare.lsstcorp.org/docushare/dsweb/Get/LSSTC-12/LSSTC_MembershipApplicationPolicy_20160413.pdf

<https://desi.lbl.gov/trac/raw-attachment/wiki/.../membership.approved.v1.pdf>

<http://icecube.wisc.edu/collaboration/governance>



Member Definitions

(terminology varies significantly for each group)

Member is generally long-term scientific staff
(tenured, non-tenured, research scientist)

Many times %FTE or %ResearchFTE devoted to the collaboration is specified
(with annual or biennial reports of effort or updates)

Post-docs and students are associated with a member

Early Career Scientists sometimes have representative on Institutional Board

Members and post-docs that move to a new institution usually given a new title and remain in the collaboration



General comments for all groups

Written membership policies (or sections of by-laws) vary from 1 to 20 pages

Institutional Board ultimately decides membership cases (sometimes explicit 2/3 vote) and usually appoints a membership advisory committee that is the initial filter for applications

Everyone requires a short written application detailing proposed new members and their roles

Stay flexible, needed to tap into as many funding sources as possible

Stay flexible, new types of membership situations arise for many years

Independence of membership and publication policies varies greatly (being a member does not always guarantee authorship on science papers)



Forming/Joining the collaboration: Group size

Collaborations generally give preference to
>2 scientist institutions, or regional groups, or consortia

Limiting access to the Institutional Board, or limiting the number of post-docs/students for one-person institutions are common

One-person institutions usually called Associate Members, perhaps these members band together and select a single member of Institutional Board



Forming/Joining the collaboration: Simple Example

The IceCube Collaboration consists of scientists at Collaboration Constituent Institutions. The condition for membership and for institutional recognition is that the group makes a significant contribution to IceCube. Significant contributions will include a contribution to the common fund proportional to the number of Ph.D. scientists in the group as well as contributions to detector operations and data analysis. The proposed contributions, role in the scientific program, and personnel are to be detailed in the MoU that is updated annually.

of their institution in IceCube. Admission of new institutions requires approval by a two-thirds majority of the IceCube Constituent Institutions, under consideration of the proposed contributions and role in the research program. Scientists who join member groups at Institutions that were members of the Collaboration prior to IceCube completion will automatically be accepted as members of the Collaboration. At all other institutions the addition of new senior personnel will require approval by the IceCube Collaboration Board.

An individual scientist or a group of scientists may be accepted as associate members of IceCube if they are sponsored by an IceCube collaborating institution to work on a specific aspect of analysis and/or service. The arrangement should be clarified in an MoU that describes the subject in which the associate will participate, the term of association and any other details.

Other groups have 1-person Associate Members but don't require sponsorship from a Full Member, example of a choice to be made



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Forming/Joining the collaboration: Buy-In

Collaborations require concrete contributions to the project, in either cash or in-kind contributions or combination

Examples include one-time \$100-250K per scientist, or \$25K/year per institution

Non-federal cash is critical to most project's early success, purchasing long lead time items before CD2: LSST mirrors, DES and DESI lenses... This can save the project many years...

But many institutions contribute mostly in-kind hardware or manpower for “infrastructure”



“Infrastructure” Tasks that can contribute to the Buy-In

DES Infrastructure Tasks

These tasks fill a need within the DES that has been defined by one of the DES Project Leaders or the Co-Chairs of the Science Committee. Examples of the DES infrastructure tasks on which a candidate will be expected to spend a significant fraction of his or her research time are listed as follows:

- Instrumentation (e.g. designing, building or commissioning DECam and calibration equipment, including the software for DECam and calibration equipment)
- Pipeline software (e.g. the implementation of the observing strategy, image extraction, DESDM work, SN survey software, and science analysis tools that will have broader application within the Collaboration beyond the candidate's science project.)
- Working Group (WG) leadership (e.g. active leadership of a WG or a study group as co-coordinator or leading a major, specific study within a WG or study group.)
- Team management (e.g. active participation on the MC or one of its sub-committees or on one of the DES Project Office Committees)
- Successful fund raising that supports the work of the DES Infrastructure Tasks beyond the immediate interests of their Collaborating Institution. (e.g. successful applications for grants and project funds that enable the design, fabrication and commissioning of equipment and software, including science software that has the potential for wide use within the Collaboration.)



External Collaborator Idea

Non-members can apply to have access to a piece of collaboration data, usually providing spectroscopic follow-up or other resources

Membership committee reviews these as well

In DES, one small external group wanted notification of core collapse supernovae candidates and provided spectra

Larger group studies CMB/DES overlap regions



Builder Idea (part of publication policy)

Normal membership not always guarantee for paper authorship

“Builders” provide large Infrastructure contribution (e.g. >2 FTE)

Can easily “opt-in” to most or all science papers

Rewards steady effort in early years when project is not approved



Summary

Membership Policy can start simply and inclusively

Some choices for Institution Board and Initial Membership Policy

Membership sub-committee or not?

1-scientist institutions “sponsored” by full members?

Rights of Associate Members?

Rights of Early Career Scientists?

Specify %FTE or vague “significant” contribution?

Does “significant” contribution scale with Nscientist?

Define “Infrastructure” or be vague?

“External Collaborator” specified or wait until later?

“Builder” status specified?

