

BYLAWS OF THE DARK ENERGY SPECTROSCOPIC INSTRUMENT COLLABORATION

Preamble

The central goal of DESI is the physics of dark energy. The large-scale structure of the Universe is a key prediction of cosmological models, and DESI observations will allow us to probe diverse aspects of cosmology, from dark energy to modifications to General Relativity to neutrino masses to the early Universe. It will be a complement to the cosmological reach of projects such as LSST and Planck. DESI fulfills the recommendations of the community task force report (“Rocky-III”), which identified a wide-field spectroscopic survey as the missing element in the Cosmic Frontier dark energy portfolio.

DESI will measure the expansion history of the Universe using the baryon acoustic oscillations (BAO) imprinted in the clustering of galaxies, quasars, and the intergalactic medium. The BAO is the most robust way to extract cosmological distance information from the clustering of matter and galaxies. It relies only on very large-scale structure and it does so in a manner that is differential versus scale, allowing us to separate the acoustic peak from uncertainties in galaxy bias or most systematic errors in the data. A spectroscopic survey allows the radial scale of BAO to be measured separately from the transverse scale.

Large-scale structure contains more information about dark energy than just the BAO. Redshift-space distortions (RSD) offer a probe of the growth rate of structure that is comparable in precision to that from weak lensing, and it probes the metric perturbations away from General Relativity in complementary ways. Large-scale structure grows in amplitude because matter flows in the direction of gravitational forces. The redshifts of galaxies traveling in these flows include the line-of-sight component of the velocity field. By comparing the clustering of pairs of galaxies along the line-of-sight to pairs transverse on the sky, we can directly infer the flow of matter and hence measure the growth rate of structure. The cosmological distortion known the Alcock-Paczynski (AP) effect also serves as an important way to study the expansion history of the Universe, particularly at higher redshift. Like BAO, the AP and RSD methods require a map of the large-scale structure of the Universe and the DESI redshift survey of galaxies will produce an exceptional measurement of the growth rate of structure.

The challenge for DESI is to survey enormous volumes of the Universe with an acceptable number density of tracers. The “Rocky-III” dark energy community panel report identified spectroscopic surveys as the most effective way to address this question. Optimization of BAO performance on dark energy always drives one to maximize sky area. With the strong scientific incentive for DESI to cover as much sky as possible, preferably the full 18,000 square degrees of low-extinction sky should be observed. DESI requires high quality multi-color photometry from which to select targets efficiently. The optimal galaxy and quasar targets are a small fraction of the total objects on the sky.

1. COLLABORATION AND MEMBERSHIP

1.1. The medium-scale Dark Energy Spectroscopic Instrument Collaboration (hereafter called the DESI Collaboration) is organized in Full and Associate Member Institutions, Regional Participation Groups, the Directorate, the Executive Council, the Technical Board, and the Institutional Board.

1.2. Membership in DESI is open to individual institutions by recommendation of the Institutional Board, based on the mechanism spelled out in Section 3. Each institution must identify itself as either Full, Associate, or as a member of a Regional Participation Group.

1.3. A Participant at a DESI institution is a long-term scientific employee, e.g., Faculty (tenured or non-tenured) or Research Scientist receiving $> 50\%$ of annual salary from the host institution. Participants may join DESI individually, with or without identifying a host institution. Participants may sponsor junior scientists to work with them on DESI as described below. The junior scientist category will consist of undergraduate and graduate students; postdoctoral researchers and fellows on short-term (≤ 5 year) contracts; and other non-permanent research staff whose relevant postgraduate experience after receiving their PhD totals less than six years (excluding time for parental, medical, and family leave or other substantial events).

Term contract scientists (including postdocs) whose contract is for a period more than 5 years or whose contract renews multiple times (more than five years in total) at the same institution will be considered only as sponsored members for a maximum period up to six years of relevant experience since PhD. Thereafter, such scientists will need to apply for Participant status to remain in DESI (with associated buy-in satisfied). Postdocs and fellows new to a DESI institution for a short term contract (five years or less), but who have more than six years relevant experience since PhD, will be allowed sponsored membership.

Participants may join DESI individually, with or without identifying a host institution.

1.4. Full Member Institutions are so named according to the rules spelled out in Section 2.2. Full Member Institutions have data rights for an unlimited number of Participants from the institution and may identify those Participants at will. Each Participant in at a Full Member Institution may sponsor any number of postdoctoral researchers, graduate students, or minimum half-time engineers, working on DESI at the Participant's institution. Each Full Member Institution will nominate one voting member to the Institutional Board.

1.5. Associate Member Institutions are so named according to the rules spelled out in Section 2.2. Associate Member Institutions must identify Participants by name. Associate Institutional Members have data rights only for their named Participants; data rights can be moved from one researcher to another only with the concurrence of the Institutional Board. Each Participant in at an Associate Member Institution may sponsor up to two postdoctoral researchers plus any number of full-time graduate students, or minimum half-time engineers, working on DESI at the Participant's institution. Each Associate Member Institution with three or more Participants will nominate one voting member to the Institutional Board. One Institutional Board representative at-large will represent all of the institutions with fewer than three Participants.

1.6. A regional group of five or more Participants may join to form a Regional Participation Group (RPG) according to the rules spelled out in Section 2.2. An RPG must identify Participants by name. RPG's have data rights only for their named Participants; data rights can be moved from one researcher to another only with the concurrence of the Institutional Board. One Institutional Board representative will be nominated for a minimum of five Participants in the RPG.

1.7. Each Full and Associate Member Institution and Regional Participation Group will maintain a current list of its Participants and sponsored employees as defined in Section 1.3, and inform the Institutional Board Chair (or designate) of changes to this list. Entry on this list constitutes being a Member of DESI.

1.8. Each DESI Participant and DESI Member Institution is expected to adhere to these Bylaws and to all policies adopted hereunder and to not take unilateral actions that could seriously and negatively impact the scientific integrity or competitive abilities of the DESI collaboration. A Participant or Member Institution maybe removed for noncompliance or non-performance in accordance with mechanism described in Section 14.10 .

2. INSTITUTIONAL BUY-IN

2.1. The purpose of the Participant or Institutional “buy-in” is to: 1) accelerate development of the DESI program ensuring an earlier start of data collection, 2) enhance the scientific capabilities of the instrument, and 3) establish the seriousness of the participation. The DESI Project seeks to raise up to \$20M through this mechanism. Contributions may be in cash, in-kind hardware, or labor applied to common infrastructure.

2.2. Each Participant may join DESI at a nominal cost of \$250K or equivalent contribution (the “buy-in”) . Costs are generally capped at \$1200K per University or Institute (discounted to \$950K for cash received on signing, prorated for partial payment). Major Institutes or Research Laboratories will be subject to a larger buy-in cap commensurate with resources and size. Early funds receive a discount, and costs will escalate annually. The details and amount of each contribution will be negotiated with the Project Director. The Project Director has the authority to recommend adjustments to these guidelines for approval by the Institutional Board.

2.3. All in-kind contributions need to specifically address items in the project budget and must be approved by the Project Manager. All such details, including the schedule and/or value of cash or in-kind contributions and how these resources will be managed, will be elaborated in institutional MOU or other external agreements.

2.4. Institutions that have reached the buy-in cap, regardless of Participant count, are deemed Full Member Institutions. Institutions that are below the buy-in cap are deemed Associate Member Institutions. A Participant buy-in is transportable to another institution by agreement of the original institution.

2.5. Participants will be expected to contribute their effort in addition to their buy-in. The Institutional Board or membership committee may be asked to evaluate and/or agree to the contributed effort.

2.6. Contributions to DESI from DOE labs or institutions with DOE funding may be subject to HEP approval. Foreign agreements will be subject to review by DOE.

2.7. Institutions that have reached the buy-in cap (or are on a payment schedule to do so) will retain Full Member Institution status from that time forward even in the event that the buy-in changes for new institutions.

2.8. In the event that MS-DESI is cancelled, all funds are at-risk, and only unspent or uncommitted funds will be refunded. The details and mechanism will be elaborated in MOU or other external agreements.

2.9. Some limited faculty or staff time funded by an agency grant (eg. a DOE University grant) specifically for DESI participation may be eligible under section 2.3.

2.10. Under exceptional circumstances the Participant buy-in can be waived by the Project Director in consultation with the Institutional Board.

3. JOINING PROCEDURE

3.1. Requests for institutional membership in DESI will be brought to the Project Director for negotiation of conditions. The Project Director will bring new cases to the Executive Council for concurrence. If empaneled, new cases are then presented to the membership committee, the membership committee will make a recommendation to the Institutional Board, or request revisions. The Institutional Board will vote at the next scheduled meeting upon recommendations.

3.2. The membership committee may identify new potential membership cases.

3.3. US federal agencies may choose to direct membership or review conditions of membership.

4. PROJECT DIRECTOR

4.1. The Director of the Lawrence Berkeley National Laboratory appoints the DESI Project Director and has delegated to the Project Director the authority for organizing and directing all aspects of the project. The Project Director is responsible for the successful construction and operations of the DESI instrument and ensuring the scientific success of the project.

4.2. The Project Director will appoint an advisory board (Executive Council).

4.3. The Project Director will appoint the Chair of the Institutional Board.

4.4. The Project Director has the authority to appoint the Project Manager, with the concurrence of the Executive Council to appoint the Project Scientist(s), Instrument Scientist(s), and any deputies of these positions. The Project Director may appoint future leadership positions or boards not listed in this document. The Project Director may review and override decisions made by members of the Directorate, the Technical Board, or the Institutional Board if in conflict with the Project Execution Plan (PEP) or the smooth execution of the project or operations. The Project Director has final authority over the technical and scientific direction of the project(s) or survey(s) and operational plans.

4.5. The Project Director is authorized to make decisions on behalf of the Institutional Board if time is of the essence with the agreement of the Directorate and Executive Council.

5. PROJECT MANAGER

5.1. The DESI Project Manager assists the Project Director in the execution of the construction project and operations. The Project Manager, with the assistance of the Project Management Support Office, is responsible for formulating and maintaining the project budget and schedule. The Project Manager, working with the Project Management Support Office, is responsible for maintaining earned value metrics and the reporting of cost performance. The Project Manager, working with the Project Safety Office, is responsible for the safety of personnel working on DESI.

5.2. The Project Manager will appoint the L2 and L3 managers and the Change Control Board.

6. SPOKESPERSON

6.1. The Project Director has delegated to the Spokesperson the responsibility for fostering the scientific productivity of the Participants, representing DESI to the outside world, raising the visibility of DESI within the astronomy and physics communities, and maintaining good morale in the Collaboration.

6.2. The Spokesperson is responsible for assuring public dissemination of scientific results.

6.3. The DESI Spokesperson is elected by the Institutional Board.

6.4. The Spokesperson is a member of the Directorate.

6.5. The Spokesperson is responsible for the performance of the science working groups and will recommend on an annual basis the slate of science working groups leads for vote by the Institutional Board.

6.6. The Spokesperson has the authority to create short-term ad hoc committees for the purpose of such tasks as nominations, creation of review materials, white papers, etc...

7. CHIEF ENGINEER

7.1. The Chief Engineer is responsible for the development of technical requirements, the development of the system interfaces, and overseeing the technical development and technical trade studies. The Chief Engineer is a member of the Technical Board, Change Control Board, and Directorate.

8. SYSTEM ENGINEER

8.1. The System Engineer is responsible for the system engineering function and value engineering process. The System Engineer is a member of the Technical Board, Change Control Board, and Directorate.

9. PROJECT SCIENTIST

9.1. The Project Director has delegated to the Project Scientist the responsibility for ensuring the scientific integrity of the project. The Project Scientist is responsible for maintaining the scientific requirements. From this perspective, he/she monitors the systems aspect of the project in all its phases and evaluates the scientific impact of changes or compromises made in the course of constructing the hardware, preparing the software, developing the survey strategy, and developing the overall plans for commissioning and operations.

9.2. The Project Scientist works to ensure that management decisions support the science goals, develops detailed requirements and validates the data processing and data releases against those requirements.

9.3. The Project Scientist is a member of the Directorate.

9.4. More than one Project Scientist may be appointed if warranted by the diversity of scientific topics or responsibilities.

10. INSTRUMENT SCIENTIST

10.1. The Project Director has delegated to the Instrument Scientist the responsibility for ensuring that the instrument will meet the technical requirements of the project. The Instrument Scientist evaluates the technical impact of changes or compromises made in the course of constructing the hardware, and develops the plans for instrument commissioning and operations.

10.2. The Instrument Scientist works to ensure that management decisions support the technical requirements, develops detailed technical requirements, and is responsible for developing commissioning and hardware validation plans.

10.3. The Instrument Scientist is a member of the Directorate.

11. OMBUDSPERSON

11.1. The Institutional Board will appoint a standing Ombudsperson for DESI to help resolve disagreements arising in any aspect of DESI in an informal manner. As a neutral third party, the Ombudsperson does not advocate for any party in a dispute. The objective is to provide a process for achieving a fair and reasonable settlement working within existing policies and procedures. When a request for services is received, the Ombudsperson will work with each party to identify appropriate alternatives that address the conflict and to achieve a mutually satisfactory resolution. Consultation with the Ombudsperson does not preclude later pursuit of a resolution through formal channels if that is still desired.

12. DIRECTORATE

12.1. The Directorate consists of the Project Director, the Spokesperson, the Chair of the Institutional Board, the Project Manager, the Chief Engineer, the System Engineer, the Project Scientist(s), the Instrument Scientist(s), future leadership positions, and any deputies of these positions. The Directorate is supported by the Project Management Support Office and the Project Safety Office. Operations coordination positions will be added when timely.

12.2. The Directorate shall be responsible for defining and maintaining the technical scope, cost, and schedule of the project as defined by the Project Execution Plan (PEP). Once the project has an established baseline, changes to this baseline shall be managed as described in the PEP. Key technical issues having substantial impact on the scope, cost or schedule of the DESI Construction Project will be presented and discussed with the Institutional Board so that the Institutional Board may provide input and recommendations on these issues to the Directorate.

12.3. The Directorate is chaired by the Project Director.

12.4. The Project Manager with the support of the Project Management Support Office is responsible for the disbursement of all funds.

13. EXECUTIVE COUNCIL

13.1. The Executive Council is appointed by the Project Director from the membership of the Institutional Board or senior membership of DESI for the purpose of providing timely advice to the Project Director. Term of appointment on the Executive Council is up to two-years and is renewable.

13.2. The Executive Council shall provide advice on the scientific scope, mission and objectives, operational priorities, and new institutions to be nominated.

13.3. The Executive Council will be limited to 12 individuals.

14. INSTITUTIONAL BOARD

14.1. The Institutional Board shall have authority to deal with general issues that concern the Collaboration as a whole with the focus on the self-governance of the Collaboration. Individual institutions will be expected to participate in the Technical Board or Operations in accordance with their expertise and contributions thereby enhancing the lines of communication within the project. The intention is to facilitate a strong consultative collaboration. These lines of communication will benefit the project by identifying expertise within the Collaboration, and they will enhance the institutional partners' practical connections with the project. Examples of Institutional Board Collaboration governance include ratification of Bylaws, new Collaboration membership, removal of a Participant from the Collaboration, ratification of science working group leads, collaboration sub-committees, and establishment of policies concerning the author list.

14.2. The Project Director will inform the Institutional Board before the expenditure of collaboration funds and will ask for the endorsement of the Institutional Board on such expenditures; however, this endorsement is not required for the Project Director to proceed. The Project Director will present the full project budget plan (both collaboration and non-collaboration funds) to the Institutional Board on an annual basis. The Institutional Board shall have the authority to propose expenditure of collaboration funds to the Project Director.

14.3. Each institution in DESI will be represented on the Institutional Board according to the mechanism spelled out in Sections 1.4, 1.5, 1.6.

14.4. The Institutional Board shall elect a Spokesperson from a slate of candidates nominated by the Project Director and Institutional Board Chair for a term up to two-years and is renewable.

14.5. The Institutional Board Chair is appointed by the Project Director for a term up to two-years and is renewable. The Chair is responsible for maintaining records that can be used to create an accurate list of Participants and their sponsored postdocs, engineers, and students. This list will constitute the DESI Membership.

14.6. Meetings of the Institutional Board shall be scheduled by the Institutional Board Chair. Advance notice shall be given indicating the time and place of the special meeting as well as issues to be considered. The meetings shall be open only to Institutional Board members (or their proxies) and lead by the Institutional Board Chair. The Institutional Board Chair is responsible for assembling the agenda and distributing the minutes of the meeting to the Institutional Board members.

14.7. The Institutional Board shall follow the collaboration model principles in its deliberations.

14.8. An Institutional Representative may designate a proxy for a Institutional Board meeting.

14.9. Unless otherwise specified, decisions of the Institutional Board are based on a simple majority of the votes cast.

14.10. Removal of a Participant must be first recommended by the Directorate and requires a two-third majority of the votes cast.

15. TECHNICAL BOARD

15.1. The Technical Board is defined in the Project Execution Plan.

16. CHANGE CONTROL BOARD

16.1. The Change Control Board is defined in the Project Execution Plan.

17. SURVEY OPERATIONS COORDINATORS

17.1. The Survey Coordinator prepares the integrated, month-by-month observing plan for the DESI survey(s) and tracks the progress of the survey.

17.2. The Operations Coordinator is responsible for the efficient operation of the survey coordinating observer schedules, ensuring that the hardware is ready, and providing operations training.

17.3. The Acquisition Manager is responsible for leading the data ingestion, processing, and distribution. The Acquisition Manager will assess data quality and monitor data releases.

17.4. The Commissioning Manager is responsible for the commissioning of the instrument and ensuring that the instrument is ready to take science data.

17.5. The Survey Coordinator, the Operations Coordinator, the Acquisition Manager, and the Commissioning Manager, will be appointed by the Directorate prior to the commissioning phase.

18. MEMBERSHIP COMMITTEE

18.1. The Membership Committee whose members are nominated by the Institutional Board Chair and approved by the Institutional Board for a one-year, renewable term, shall be a standing committee to assist the Institutional Board in the review of new membership.

19. PUBLICATION

DESI will create a spectroscopic survey distinguished by size (number of redshifts and other parameters), quality of the reductions and calibration, and uniformity of selection of the targets. Accordingly, DESI is expected to have enormous scientific impact, with publications addressing Dark Energy and many other fields.

Just as the construction and survey planning are envisioned to involve the Collaboration as a whole, the publication process will also be cooperative, where scientists are kept aware of efforts elsewhere and where policies promote the best science outcomes by encouraging openness and cooperation, promoting the career interests of young scientists, while protecting the interests of people who have invested much in some aspect of creating the survey. This vision of a collaborative approach to publication of scientific results is common in the HEP culture and has been one of the signature successes of recent experiments.

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.

19.1. The Publication Board (PB), 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. Policies established by the PB must be ratified by the Institutional Board. Disagreements that cannot be resolved by the Publications Board will be resolved by the Spokesperson.

19.2. The PB will establish procedures so that the Collaboration is aware of new papers well in advance of publication and has the opportunity to provide input and determine authorship interest.

19.3. Press releases must be approved in advance by the Project Director or Spokesperson to enable agency review when required.

19.4. Publications and release of data must adhere to the Project's Data Management Plan.

20. CONFERENCE TALKS

20.1. The Speakers 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 public presentations. Policies established by the Speakers Board must be ratified by the Institutional Board.

20.2. The Speakers Board will seek speakers to represent the Collaboration at conferences. Any member of the DESI collaboration can suggest conferences to the Speakers Board.

21. PROPOSALS TO FUND SCIENTIFIC RESEARCH

21.1. Proposals submitted by the Directorate to government or philanthropic sources to secure funds to support the construction, operation, or scientific exploitation of DESI take precedence over other DESI-related Proposals by anyone, and the Directorate may take appropriate steps to protect them, with proper notification to the Collaboration.

21.2. Proposing institutions or individuals are responsible for all incremental costs deriving from the proposed research.

21.3. Proposals submitted by a Participant Institution shall be carefully vetted by that institution to ensure that they do not contain items or describe arrangements that conflict with the Bylaws, the MOU's, or the agreements already in place with major DESI funding sources. The Participant Institution is encouraged to share proposals with the Directorate.

22. AMENDMENTS TO THE BYLAWS

22.1. Amendments to the ratified Bylaws may be proposed to the Project Director by no less than five Members to the Institutional Board for evaluation. Upon receiving a positive evaluation from the Project Director, the Institutional Board Chair shall announce the proposed amendments to the Institutional Board. A simple majority is required for the adoption of the proposed amendments.

22.2. If any conflict exists between these Bylaws and DOE approved documents (such as the Project Execution Plan), the latter will take precedence.

22.3. The following motion was passed by vote of the institutional board on March 3, 2015: Shall the Buy-in be increased from \$200K to \$250K per Participant (discounted to \$200K for cash received on signing, prorated for partial payment) and increased from \$950K to \$1200K for Full Member Institutions (discounted to \$950K for cash received on signing, prorated for partial payment). Increase will go into effect for agreements signed after June 30, 2015.

22.4. The following motion was passed by vote of the institutional board on January 26, 2017: Do you approve the change to Section 1.3 of the DESI bylaws that was distributed, discussed and modified by the Institutional Board on Friday, Jan 13, 2017? From: A Participant at a DESI institution is a long-term scientific employee, e.g., Faculty (tenured or non-tenured) or Research Scientist receiving $> 50\%$ of annual salary from the host institution. Participants may join DESI individually, with or without identifying a host institution. To: 1.3. A Participant at a DESI institution is a long-term scientific employee, e.g., Faculty (tenured or non-tenured) or Research Scientist receiving $> 50\%$ of annual salary from the host institution. Participants may join DESI individually, with or without identifying a host institution. Participants may sponsor junior scientists to work with them on DESI as described below. The junior scientist category will consist of undergraduate and graduate students; postdoctoral researchers and fellows on short-term (≤ 5 year) contracts; and other non-permanent research staff whose relevant postgraduate experience after receiving their PhD totals less than six years (excluding time for parental, medical, and family leave or other substantial events).

Term contract scientists (including postdocs) whose contract is for a period more than 5 years or whose contract renews multiple times (more than five years in total) at the same institution will be considered only as sponsored members for a maximum period up to six years of relevant experience since PhD. Thereafter, such scientists will need to apply for Participant status to remain in DESI (with associated buy-in satisfied). Postdocs and fellows new to a DESI institution for a short term contract (five years or less), but who have more than six years relevant experience since PhD, will be allowed sponsored membership.

23. MODEL COLLABORATION PRINCIPLES

The following are model principles to guide the formation and operation of the collaboration.

- The Collaboration organizational model will be based upon HEP experiments, and the successful experience in SDSS-III and DES.
- Collaboration will strive to maximize the scientific return.
- Produce high-quality science in a timely manner.
- Promote full utilization of the data, both the key project and other topics.
- Incentivize people to contribute to the execution of the project (hardware, software, testing, common science infrastructure, documentation).
- Ensure a good supply of motivated people to work on science analyses.
- Provide appropriate credit both to the analysts and to the builders.
- Provide well-rewarded leadership opportunities, so that the project is a positive factor in people's careers.
- Incentivize people to work together in completing the key project analyses.
- Provide a mechanism for renewal of personnel, essential for robustness in a decade-scale project.
- Provide a strong platform for training of junior scientists including participation in the instrument construction.
- Provide flexibility for novel uses of the data and/or instrument.
- Provide a healthy collaborative culture, with enough policy and procedures to set and enforce standards.
- Provide good communication between the rank-and-file scientists and management, particularly about survey requirements and implementation.
- Broadening the scientific expertise beyond the HEP community will make the project generally more successful and will be a benefit to the dark energy research.
- The Collaboration will establish a requirement for cash, in-kind, or effort (the 'buy-in'). Scientists funded by the DOE OHEP Cosmic Frontier may be able to apply a portion of their research effort to this requirement.
- Scientists will be expected to contribute their effort in addition to their buy-in. This can be in the form of a contribution to the project or to common science infrastructure, documentation, etc.
- Scientists or institutions will not be allowed to reserve particular research topics. Some exceptions will be considered for Ph.D. thesis students.
- Data taken by the MS-DESI instrument as well as high-level spectral products will be regularly publicly released after a proprietary period with the intention of producing high-quality science in a timely manner. Data releases will include software.

24. ORGANIZATION CHART

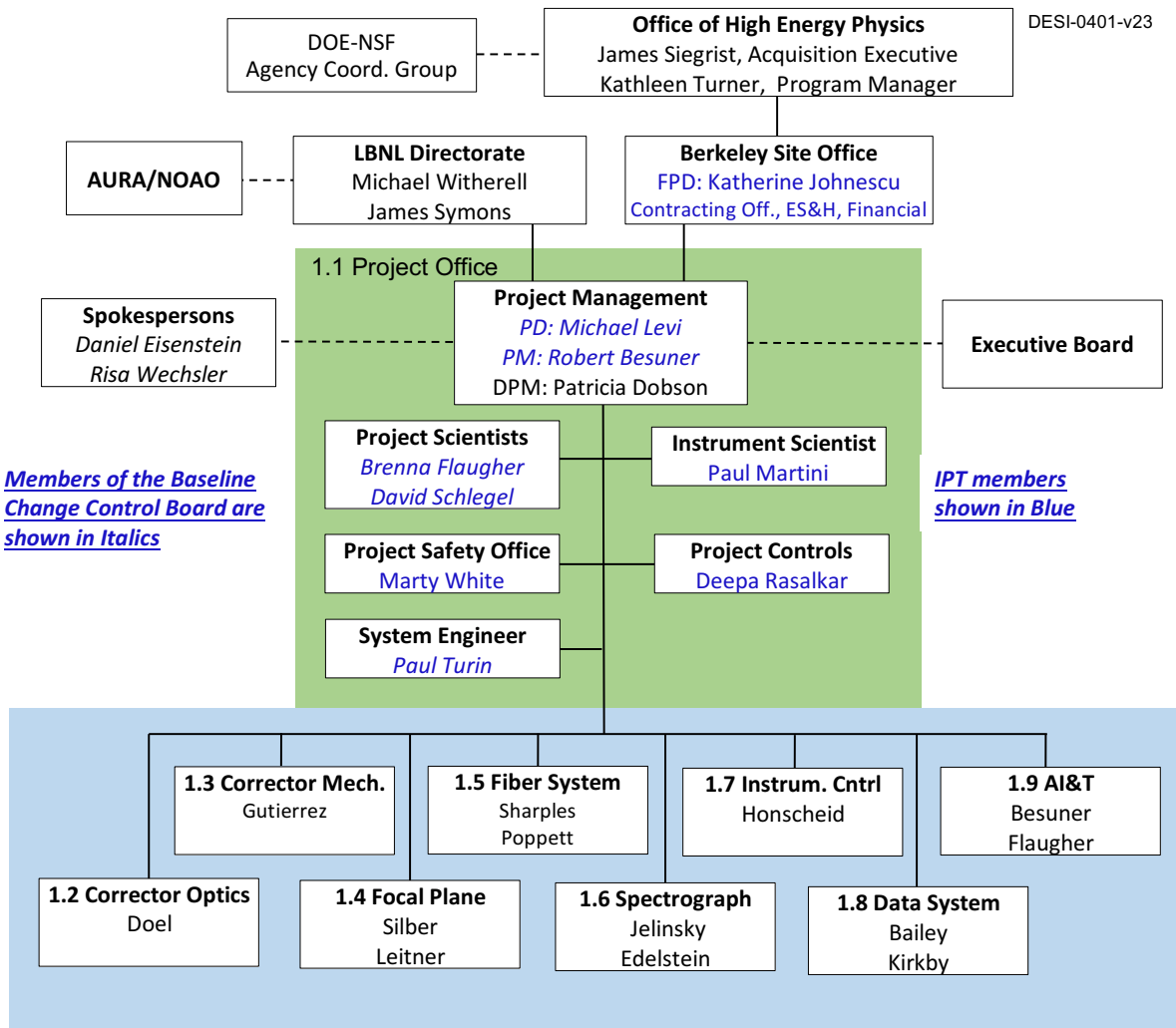


FIGURE 1. Organization of the project starting from the Office of High Energy Physics showing the project office at LBL and the key organizational structure of the collaboration.