Code of Conduct for the NOvA Collaboration

The NOvA collaboration strives to produce world class science. We value dedication, individual
effort, teamwork, and mutual support. We aim to maintain high intellectual and ethical standards as
we pursue our research. The NOvA Institutional Board has adopted this Code of Conduct to further
these goals; membership in the NOvA collaboration signals acceptance of this Code.

⁵ This Code sets standards of behavior in NOvA workspaces, at NOvA-sponsored events, including ⁶ related social events, and when a collaborator is representing the collaboration. It does not replace,

⁷ but augments the Fermilab Statement of Community Standards:

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https://publicdocs.fnal.gov/cgi-bin/ShowDocument?docid=2

In Section 1 we articulate the positive collaborative culture we seek to establish and maintain and Sec-9 tion 2 defines proscribed behavior. The terms of acceptance and applicability of this code are outlined 10 in Section 3. To promote a positive culture and provide support to our members, the collaboration 11 will have two Equity, Diversity, and Inclusion (EDI) chairs whose roles are outlined in Section 4. 12 Our commitment to a healthy collaborative culture requires that we recognize that violations of our 13 standards of collaborative behavior may occur and that we are ready to respond to protect and 14 support our collaborators should they face the consequences of misconduct. To that end, Section 5 15 outlines the channels available to collaboration members and EDI chairs for reporting and responding 16 to misconduct. Section 6 outlines how the code is to be disseminated across the collaboration and in 17 particular provides specific guidance about its posting at meetings of the collaboration. 18

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- 21 This document draws heavily from the LSST DESC Code of Conduct which itself draws from the London CoC and
- 22 related documents from Software Carpentry, PyCon, and Geek Feminism, all under Creative Commons licenses.



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⁴³ 1 Statement of Values

44 NOvA firmly believes that the success of the collaboration's scientific efforts depends on the free
45 exchange of ideas and the ability of all members to contribute without reservation or impediment.
46 Accordingly, in interactions with one another, the collaboration has chosen to abide by the following
47 principles to maintain the health and vibrancy of our community:

Welcome and mutual understanding Collaboration members comprise many nationalities, cul-48 tures, socioeconomic backgrounds, and value systems. We also exemplify diversity in many physical 49 attributes and abilities, aspects of individual identity, and professional environment and position. 50 Collaborators should work to value these differences in one another, to foster relationships that pro-51 mote mutual understanding, and to seek opportunities to welcome everyone into our scientific process. 52 These differences, which can lead to a variety of viewpoints when examining the same situation, pro-53 vide the collaboration the opportunity to understand each situation more completely. Whenever 54 possible, collaborators spanning a diversity of backgrounds and personal traits should be incorpo-55 rated into decision-making processes so that our many viewpoints can be reflected in our collective 56 effort. 57

Respectfulness and professionalism The nature of scientific discourse frequently results in dis-58 agreements or differences of opinion. These differences should be valued and handled in a professional 59 manner. Every individual is responsible for expressing opinions courteously and politely and for of-60 fering all collaborators equal opportunity to be heard. Criticism, where warranted, should be offered 61 constructively and respectfully without any reference to individual traits or personality. Similarly, 62 constructive criticism should be received without taking personal offense. Collaboration members 63 should also be aware that behaviors and language acceptable to one person may not be to another 64 and members should make every effort to ensure that words and actions communicate respect and 65 consideration for others. Whenever possible, interpersonal conflict should be resolved directly in a 66 respectful manner, involving other collaborators and/or collaboration management if needed. 67

Supportiveness and empowerment NOvA is an organization which depends on the success of 68 its members to achieve its scientific goals. It is important for all scientists, and critically important 69 for the success of our early career collaborators, to continually seek professional growth and devel-70 opment. Therefore, all collaborators, and especially those occupying managerial positions, should 71 actively seek to provide the resources and encouragement needed to support their collaborators as 72 they develop as scientists. Senior members should pay particular attention to interactions with less 73 senior collaborators, understanding that their influence can powerfully shape their colleagues' careers 74 and futures. Whenever possible, collaboration members should seek to empower their collaborators to 75 overcome any structural barriers that could otherwise prevent them from reaching their full potential 76 and intervene to remedy situations when the behavior of one collaborator marginalizes another. 77

Scientific integrity NOvA collaborators should conduct themselves with the highest level of scientific integrity. Each collaborator is responsible for voluntarily and carefully attributing work to its
originator. Every effort should be made to document results in a clear and complete manner so that
the entire collaboration can evaluate them in an informed way.

⁸² 2 Scientific Misconduct

To maintain a good working environment that enables all collaborators to do their best science. 83 we should endeavor to always treat each other with respect and acceptance according to the values 84 outlined in Section 1. Discrimination, harassment, and bullying create a hostile environment that 85 undermines our values and marginalizes individuals and communities while impeding the healthy 86 exchange of ideas, lowering productivity, undermining career advancement, and reducing the quality, 87 integrity, and pace of our science. We affirm that discrimination, harassment, bullying, and research 88 misconduct in any scientific or learning environment are unacceptable, and constitute scientific mis-89 conduct, which will not be tolerated by our collaboration. Specific definitions of each of these terms 90 follow. 91

Discrimination Discrimination is the unfair treatment in professional opportunities, education,
benefits, evaluation, and employment (such as hiring, termination, promotion, compensation) based
on factors such as ethnic or national origin, race, religion, citizenship, language, political or other
opinion, sex, gender, gender expression, gender identity, sexual orientation, disability, physical appearance, age, economic class, lactation, pregnancy, or status as a caregiver, including as a parent.
Discriminatory practices can be explicit or implicit, intentional, or unconscious.

Harassment Harassment is a type of discrimination that consists of a single intense and severe act, 98 or of multiple persistent or pervasive acts, which are unwelcome, demeaning, abusive, or offensive. 99 Offensive conduct constitutes harassment when 1) tolerating or participating in it is made a condition 100 of obtaining or maintaining an opportunity, education, benefit, evaluation, or employment; 2) the 101 conduct is severe or pervasive enough to create a work or educational environment that a reasonable 102 person would consider intimidating, hostile, or abusive. These acts may include epithets, slurs, 103 or negative stereotyping based on gender, race, sexual identity, or other individual characteristics 104 (especially, but not limited to, those protected by applicable law). Also included are threatening, 105 intimidating, or hostile acts; denigrating jokes or displays; and the display or circulation of written 106 or graphic material that denigrates or shows hostility or aversion toward an individual or a group. 107 Harassment includes making and pursuing bad faith claims of misconduct, that is, claims known to 108 the reporter to be false. 109

Sexual harassment includes but is not limited to inappropriate, offensive, or obscene verbal, written or electronic communications, inappropriate or unwelcome physical contact, unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature.

Bullying Bullying may be characterized as offensive, intimidating, malicious or insulting behavior, or, an abuse or misuse of power through means that undermine, humiliate, denigrate or injure the recipient. Bullying can include abusive criticism, humiliation, the spreading of rumors, physical and verbal attacks, isolation, undermining, and professional exclusion of individuals through any means.

Research Misconduct Research misconduct includes but may not be limited to falsification, fabrication, or plagiarism. Fabrication is the act of making up data or results and/or knowingly recording or reporting made-up or fake data. Falsification is the manipulation of research materials, equipment, or processes or the changing or omitting data or results such that the research is not accurately represented in the research record. Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit. Research misconduct also includes violations of the NOvA Data Approval and Publication Rules (nova-docdb 8783).

¹²⁴ 3 Applicability, Acceptance and Limitation

125 3.1 Applicability and Acceptance

This Code sets standards of behavior in NOvA workspaces, at NOvA-sponsored events, including
related social events, and when a collaborator is representing the collaboration. Membership in the
NOvA collaboration signals acceptance of this Code.

This Code will be governed by the rules set out in the IB Bylaws (DocDB-6094). When amendments are proposed, the IB chair will consult with the EDI chairs prior to a vote.

In no circumstances does the NOvA Code of Conduct supplant laws or institutional policies or requirements to which members of NOvA or home institutions are subject, including reporting requirements those individuals or entities may have. It is understood that NOvA members may report allegations of violations to home institutions, government agencies, or local authorities for investigation per applicable laws, regulations, and policies.

136 3.2 Limitation

This Code of Conduct shall not be construed as creating any employer-employee, joint venture, 137 partnership, duty, trust, obligation to pay, or other relationship between NOvA, member institutions, 138 grantors, funding institutions or agencies, home institutions, or members, including NOvA leadership 139 and committees. Although NOvA encourages all members to abide by this Code of Conduct, NOvA 140 remains a voluntary member body, and members and their affiliated institutions, to the extent allowed 141 by the law of the state in which the member and/or the member's affiliated institution is located, 142 waive any and all claims, liabilities, or damages against NOvA, member institutions, grantors, funding 143 institutions or agencies, home institutions, and NOvA members involved in implementing the Code 144 of Conduct arising from the enforcement of, or failure to enforce, this Code of Conduct. 145

¹⁴⁶ 4 Equity, Diversity, and Inclusion Chairs

The NOvA collaboration will have two co-chairs committed to advancing equity, diversity, and inclusion within the collaboration. The chairs are charged with promoting the collaboration culture outlined in this Code, serving as points of contact for collaboration members with concerns or suggestions related to equity, diversity, and inclusion, facilitating the resolution of conflicts related to this code, receiving and responding to reports of violations of this code, and escalating reports through proper channels when appropriate.

The EDI chair positions will be convener-level positions in the collaboration who will be responsible to the co-spokespeople, will participate in convener meetings and in collaboration meeting planning, and will be expected to report to the collaboration regularly. The names of the current EDI chairs and their contact information will be prominently displayed on the collaboration web pages.

¹⁵⁷ The appointment and terms of these positions are described in Section 4.3.

158 4.1 Roles of the EDI Chairs

159 In their convening roles the EDI chairs will:

- Serve as points of contact for collaboration members with concerns or suggestions related to equity, diversity, and inclusion.
- Identify new issues and opportunities for systemic change for NOvA to promote equity, diversity, and inclusion within the collaboration. The EDI chairs will actively gather information about collaborators' experiences and perceptions that will provide insight into existing issues and potential resolutions. The EDI chairs will be a source of detection and early warning of new issues and a source of suggestions for improvements to existing processes.
- Identify and implement ways to raise the collaboration's awareness of how NOvA's professional culture intersects with the values presented in this Code of Conduct including the identification and dissemination of best practices and strategies for collaborators interested in taking a role to improve the collaboration climate.
- Report periodically to the co-spokespeople and collaboration on the status of the collaboration climate as it pertains to equity, diversity, and inclusion.
- Identify, recommend, and maintain training resources for future EDI chairs.

The EDI chairs are also responsible for assisting individuals reporting potential violations of this Code of Conduct. When such violations or conflicts are raised, the role of the EDI chair(s) is first and foremost to listen and provide support without judgment. The EDI chair(s) will work with the person(s) or group raising the issue to determine what actions or remedies might bring resolution to the issue. In all cases, the EDI chair(s) will help identify community and/or campus resources such as legal counseling and advocacy as well as physical and mental health resources.

Concerns regarding violations of this Code of Conduct reported to the EDI chairs will inform them about the collaboration climate. When an individual is unable or unwilling to formally report a concern, the EDI chair(s) can assist by helping give voice to the concern and/or creating an awareness of the issue among appropriate decision-makers in the organization. The EDI chair(s) will make regular anonymized reports to the co-spokespeople which may serve as the basis for changes to the collaboration working environment.

When the issues or concerns rise to the level where action or remedies are required for their resolution, the EDI chair(s) may take actions to resolve the situation with the consent of the reporting individual. These actions are outlined in Section 5.

¹⁸⁹ 4.2 Commitment to Confidentiality and Privacy

The EDI chair(s) will seek to protect the privacy of individual(s) or group reporting and/or affected by violations of this Code of Conduct. The EDI chair(s) will strive to avoid taking any actions that may reveal the identity of the individual(s) bringing the report or identifying specifics of the report to anyone inside or outside the collaboration without that individual(s)'s permission. If the report is made to only one EDI chair, they will not disclose information to the other EDI chair without the individual(s)'s permission. The EDI chair(s) will also aim to protect the identity of the person reported to have violated the Code of Conduct (the "respondent" hereafter).

In certain cases, the EDI chair(s) may be concerned by an imminent risk of serious harm or be required by US law, other applicable law or by their own institutional policy to report the conduct to an appropriate office or local authorities. The EDI chair will inform the concerned individual of any potential reporting requirements. If there are concerns about confidentiality, the individual raising the issue can discuss these questions with the EDI chair(s) before revealing any confidential information.

203 4.3 Selection of EDI chairs

The EDI chairs will serve in two-year terms staggered by one year; one of the two initial chairs will serve a one year term. EDI chair(s) may be re-appointed. Upon appointment and reappointment, EDI chairs will be expected to complete the recommended training program established by previous chairs.

The EDI chairs will be selected by the co-spokespeople. When it is time to select a new EDI chair the co-spokespeople will solicit nominations from all members of the collaboration and choose among the candidates nominated. The co-spokespeople will ensure that the EDI chairs have sufficient seniority that they should conduct their duties free from intimidation, are highly visible and accessible to the collaboration, are endorsed by the early career members of the collaboration, and represent the diversity of the collaboration to the best extent possible. The co-spokespeople are strongly encouraged to maintain gender diversity in the EDI chair positions.

²¹⁵ 5 Reporting Scientific Misconduct

²¹⁶ 5.1 Reporting and Investigation of Scientific Misconduct

Any member of the NOvA collaboration with a concern about a violation of this Code of Conduct can contact one or both of the EDI chairs. The EDI chair(s) will work with the reporting individual to decide on an appropriate course of action and understand what remedies the reporter is seeking. The EDI chair(s) will help the reporter identify support resources, such as an institution's Title IX office, Equity, Diversity and Inclusion (or equivalent) office or Human Resource contact at Fermilab. As described in Section 4.2 the EDI chair(s) will seek to maintain privacy and confidentiality of the reporter and to the extent possible of the person reported to have violated the Code of Conduct.

In cases where the EDI chair(s) and the reporter judge that a formal investigation is not warranted or desired, some options for outcomes include:

No immediate action, but the report informs the EDI chair(s) about collaboration climate and patterns of behavior which are regularly and anonymously reported by the EDI chair(s) to the co-spokespeople. This knowledge may inform changes to the collaboration working environment or future investigations.

• Guiding or coaching reporters to deal directly with other parties as well as confronting respondents about their alleged behavior and possibly involving the collaboration working group conveners and/or collaboration co-spokespeople.

• Direct actions by the co-spokespeople in accordance to the rights and responsibilities afforded to the co-spokespeople by the collaboration.

Cases which warrant a formal report include reports of discrimination, sexual harassment, bullying, retaliation, and research misconduct. In fact, under many of these circumstances, a formal report to an institution or local authorities is required by law or institutional policy. The EDI chair(s) will provide guidance and support to the affected individual(s) in making a formal report which may include one or more of the following:

• A report to the collaboration leadership which may lead to an investigation.

A report to the Neutrino Division Human Resources (HR) contact person based on the Fermilab
 Statement of Community Standards (SOCS).

- A report to relevant host or home institutions and/or professional societies.
- A report to law enforcement.

Anonymous reports can also be made to the Fermilab Neutrino Division Human Resources Partner¹ or through the Fermilab Action Line, +1-630-840-4000. In addition, the Fermilab General Counsel web site² provides information on how to make anonymous reports to Fermilab and the Department of Energy.

In cases where the Fermilab SOCS applies, the EDI chair(s) and reporter are encouraged to pursue reporting through Fermilab. If it is unclear whether the Fermilab SOCS applies, the co-spokespeople and/or EDI chair(s) will consult with the FNAL Neutrino Division HR representative. The EDI chair(s) will support the reporter in identifying avenues with the intent of achieving a satisfactory resolution of any report of misconduct.

¹The WDRS contact listed here: http://neutrinophysics.fnal.gov/wp-content/uploads/ND_Org_Chart.pdf

² http://generalcounsel.fnal.gov/how-to-report-fraud-waste-or-abuse/

As per U.S. federal regulations, any member affiliated with a U.S. research institution must report any allegation of possible research misconduct to their local Research Integrity Officer for adjudication. Any member not affiliated with a U.S. research institution should report any allegations to the leadership of the Fermilab Research Alliance who shall then forward the allegation to an affiliated Research Integrity Officer for guidance.

In cases where no other appropriate reporting channel can be identified, the NOvA co-spokespeople will attempt to identify an investigator from outside the collaboration. The investigator will be charged with determining if there is convincing evidence that a violation of the NOvA Code of Conduct has occurred and presenting the evidence to support those findings. The investigator's report will be delivered to the co-spokespeople. To the extent possible, the identities of the reporter, respondent, and witnesses will be kept confidential during the investigation and in the final report.

²⁶⁵ 5.2 Formal Notice and Interim Measures

Any communications of the reporter with the EDI chair(s) will not constitute formal notice to the NOvA collaboration, to the reporter's home institution, or to the home institution of the subject of the report, with the exception of those cases where notice is required by law or institutional policies which apply to the EDI chair(s).

If a reporter chooses to pursue a formal report, the reporter and EDI chair(s) are strongly encouraged to formally notify the collaboration co-spokespeople. Formal notice can come from the EDI chair(s) or reporter and should include a factual written summary of what is being reported including the names of the reporter and respondent.

Once notified, the collaboration co-spokespeople are authorized to take interim actions while the investigation is ongoing without the presumption that a violation has occurred. These may include actions which limit contact between the respondent and reporter, restrict in-person or remote attendance at meetings, suspend the respondent from leadership positions, or other actions deemed necessary by the co-spokespeople to ensure the safety and well-being of collaborators.

279 5.3 Consequences of Findings of Scientific Misconduct

If convincing evidence of misconduct is found, the co-spokespeople will agree on a recommendedremedy which may include, but is not limited to

- A formal report to the supervisor, employer or institution,
- A ban from in-person participation at collaboration meetings,
- Removal from leadership position(s),
- Removal from authorship lists,
- Removal from collaboration.

If the remedy recommended by the co-spokespeople involves the suspension or removal of privileges 287 granted to collaborators through the NOvA Institutional Board, including, for example, authorship 288 rights or collaboration membership, the co-spokespeople will introduce their recommended remedies 289 as a motion to the IB at an IB meeting to be scheduled in a timely fashion but with at least two weeks 290 notice. Members of the IB will be provided a copy of the investigator's report, redacted to protect 291 identities of reporter, respondent, and witnesses. The IB will have at least two weeks to consider the 292 report before a vote. The motion will carry if approved by a majority in a secret ballot vote of the 293 IB members attending the vote. An abstention is not a vote for this purpose. 294

During these deliberations and afterward, the co-spokespeople, IB Chair, EDI Chair(s) and mem-295 bers of the IB will be committed to protecting the privacy of the text and findings of the investigator's 296 report, the identities of reporters, respondents, and witnesses involved in the report, and the nature 297 and specifics of the IB's deliberations. IB members will recuse themselves from these deliberations 298 and votes if at any point they become aware of a conflict of interest or a perceived conflict of interest 299 including prior knowledge or involvement with the case under consideration. Questions about con-300 flicts of interest should be directed to the IB Chair for resolution. Willful or negligent violations of 301 the integrity of this process are a serious violation of this Code of Conduct. 302

This Code grants the IB the right to remove or sanction a member of NOvA without formal investigation based on sanction or censure by other institutions for activity that constitutes a violation of the NOvA Code of Conduct. These institutions include Fermilab and other laboratories, universities, and professional societies.

307 5.4 Cases involving NOvA Leadership

If the allegations involve both EDI chairs, a reporter may approach any senior collaboration member for guidance and support. If the alleged violation relates to NOvA co-spokespeople, the Chair of the NOvA IB will assume the roles assigned to the co-spokespeople in the sections above. If the allegations relate to the NOvA IB chair, the roles assigned to the IB Chair will be replaced by the collaboration co-spokespeople.

313 5.5 Retaliation

Retaliation toward a member who pursues any of the reporting options listed above, or toward any-314 one assisting either in the reporting or investigation of a claim, is a severe violation of this Code. 315 Retaliation includes unjustified demotion or re-assignment of project duties, third party reprisals, as 316 well as any breach of confidentiality, defamatory statements, and any statement or action intended to 317 intimidate or harass anyone involved in an investigation. Refusal to cooperate with an investigation 318 of misconduct and non-compliance with interim measures requested by the co-spokespeople are con-319 sidered forms of retaliation. Retaliation perpetrated by any member of the collaboration, whether or 320 not involved in an investigation, will be pursued to the fullest extent by the collaboration. 321

322 6 Dissemination of the NOvA Code of Conduct

This Code will be disseminated to the collaboration by the Institutional Board chairperson through the Institutional Board representative of each institution. It is the responsibility of the Institutional Board representatives to ensure that new collaborators at each institution are made aware of this code. The co-spokespeople and Institutional Board chair will make prospective new collaborating institutions aware of this code when inquiries are made about joining the NOvA collaboration.

When the NOvA collaboration comes together in person for meetings we have an opportunity to reaffirm and exercise our commitment to the values outlined in the NOvA Code of Conduct. During the registration process and at the start of NOvA collaboration meetings and workshops the cospokespeople and/or organizers will reference and display the notice below. Participation in a NOvA meeting will signal acceptance of the Code of Conduct.

NOvA Code of Conduct

The NOvA Collaboration has adopted a Code of Conduct, nova-docdb-32404. The collaboration and the local organizers are committed to conducting meetings that are productive, welcoming, and reinforce our mutual understanding. NOvA will not tolerate harassment of participants in any form. By participating in this NOvA meeting you agree to:

- Behave professionally and with respect. Do not insult or put down other meeting participants.
 Do not carry out disruptive behavior or tolerate disruptive behavior from others. Encourage participation from all collaboration members.
- Communicate appropriately. Aim for a professional audience including people of many different backgrounds. Exclusionary or offensive comments or jokes, such as those related to personal attributes, are not appropriate. Sexual language and imagery are not acceptable under any circumstance.

Unacceptable meeting behavior includes, but is not limited to, sustained disruption of talks or other
events, unwelcome physical contact, sexual attention or innuendo, intimidation, stalking, and recording of an individual without consent. Consent for photography should not be assumed; subjects
should be contacted prior to use or posting of images.

All members of the NOvA collaboration have a responsibility to their collaborators to insist on professional behavior and are empowered and expected to intervene to resolve conflicts and to prevent or stop undesirable behavior. Participants asked to stop any behavior inconsistent with this code are expected to comply immediately. Sustained disruptive behavior and conflicts which cannot be resolved should be reported to the co-spokespeople or their designees who are authorized to take action including restricting contact between individuals or removal of individuals from the meeting.

³⁵⁴ This code applies to collaboration sponsored meetings and events including social events.