2023 Climate Survey Report

DEPARTMENT OF PHYSICS AND ASTRONOMY UNIVERSITY OF WEST VIRGINIA



Executive Summary

The Department of Physics and Astronomy at the West Virgina University commissioned Sidrat Research Inc. to conduct a climate survey, polling community members on their perceived satisfaction with the department.

The survey was designed using best practices from other similar climate/DEI surveys in the context of American academic institutions and building on practices from previous internally conducted surveys to enable longitudinal comparisons. The survey was deployed during a window from April 28 and May 10, 2023, with a response rate of 38%.

Overall, the survey identified that 63% of respondents were either satisfied or completely satisfied with the overall climate of the department, with no statistically significant variations due to demographic factors. Further, 86% of respondents felt accepted and included by the department. Positive (negative) interactions with faculty members were a cause of many sentiments of inclusion (exclusion) amongst respondents.

Three distinct populations appear when splitting responses by their indicated satisfaction with the Department: The Satisfied, Ambivalent, and Unsatisfied populations. The most significant variation between these groups occurs in the reported rates of verbal harassment. Those who are unsatisfied with their experience in the department report experiencing significantly higher rates of verbal harassment (41%) compared to the Satisfied population (4%). In searching for departmental initiatives which bridge the gap between the three populations, informal department events (such as social events in the main office), department parties (the potluck, holiday party and the fall party), colloquium and the graduate mentorship program emerge as fostering sentiments of inclusion for all respondents.

The composition and analysis of the survey was conducted by Taylor Kutra and Dr. Mubdi Rahman from Sidrat Research Inc.

Survey Background

The West Virginia University Department of Physics and Astronomy Climate survey was collaboratively designed, deployed, and analyzed following best practices from academia.

Sidrat Research Inc. was commissioned to design, deploy, and analyze a diversity, equity, and inclusion survey for the West Virginia University Department of Physics and Astronomy (hereafter referred to as the department) as an independent third party. The survey was designed specifically for the Department of Physics and Astronomy with questions tailored to specific initiatives and contexts of the department. Respondents were given a two-week collection window to respond to the survey and ensured that no identifiable or disaggregated data would be provided to the commissioning department.

Survey Design

The design of this survey took best practices from climate/diversity surveys tailored to the American academic community. These include the Stanford University IDEAL survey¹, the University of Michigan Campus Climate Survey², and the AIP TEAM-UP student survey³. To enable longitudinal tracking and to appropriately target questions of direct relevance to the department, survey questions were adopted in conjunction with the WVU Department of Physics and Astronomy's Diversity, Equity and Inclusion (DEI) Committee. Demographic questions were designed to match classifications of protected classes as designated by the 2020 US Census⁴, with some modifications made as required for the context of the survey.

¹ <u>https://idealdeisurvey.stanford.edu/</u>

² <u>https://diversity.umich.edu/data-reports/climate-survey/</u>

³ <u>https://www.aip.org/diversity-initiatives/team-up-task-force</u>

⁴ <u>https://www.census.gov/programs-surveys/decennial-census/decade/2020/2020-census-</u> main.html

The key longitudinal question asked respondents about their satisfaction with their overall experience in the department. With a slight rephrasing from the 2020 WVU Department of Physics and Astronomy survey, this question remains in the survey. Previous surveys also had respondents give impressions of the department climate in terms of descriptive words, such as a scale between hostile to friendly. This basic question is maintained in this while simplifying the cognitive load of the questions. Respondents were instead asked to rate their agreement with specific statements, such as "I think the WVU Department of Physics and Astronomy is friendly' from Strongly agree to Strongly disagree.

New questions added to the survey ask respondents to assess how their experience with the department has changed over time, their fairness of access to resources and the adequacy of support offered by the department.

Finally, the department DEI committee indicated a desire for community impressions on the inclusiveness of various departmental initiatives and events. Before asking about the events and initiatives supplied by DEI committee, the survey prompted unprimed respondents to list any events or initiatives where they felt accepted and included. This tactic assures that no significant event or initiative was missed by the survey.

The departmental DEI committee viewed and provided feedback on the survey prior to its deployment.

Survey Deployment

The official collection window for the climate survey was between April 28, 2023, and May 10, 2023. The survey was provided as a direct e-mail invitation to each individual member of the Department of Physics and Astronomy to their official WVU e-mail address. The targeted groups within the department were Undergraduate Students, Graduate Students, Postdoctoral Fellows, Staff, and Faculty. A total of 242 survey invitations were sent to members of the department. Follow-up/reminder e-mails were sent to recipients who had not completed the survey on May 2, 2023, May 8, 2023, and May 10, 2023. An auxiliary link to the survey was provided for those who had not received the invitation, though no responses were received through this means. No identifiable information regarding the method of survey access and survey answers were collected or stored.

Participation in the survey was incentivized through the opportunity to enter a draw for one of five digital gift cards, with 50 of the respondents choosing to enter the drawing. The winners of the drawing were selected and informed on May 15, 2023.

Survey Response Rate

The overall survey response rate was 38%, with 92 respondents out of a possible 242 invited to take the survey. Response rates were highest amongst postdoctoral fellows (67%), faculty (57%) and graduate students (46%), and lowest amongst undergraduate students (12%). The overall response rate is in line with the standard response rates of similar climate/EDI surveys taken from within academic communities. The response rate was also in line with the 2019 WVU Physics

and Astronomy climate survey (which had a response rate of 49%). This year's response rate was significantly higher than 2020 (28%), though this may have to do with extenuating circumstances due to the beginning of the COVID-19 Pandemic in March 2020. Distributing the survey earlier during the academic term may increase response rate, especially for the undergraduate student population.

Survey Analysis Methodology

Most questions on the climate survey were categorial or ordinal in nature. To determine statistical significance of variations identified in the categorical or ordinal data, we adopt a Chi-squared test for independence on segregated samples. Statistically insignificant but numerically large variations in the data are not presented numerically or graphically in this report to avoid biasing the reader.

For open-ended responses, key findings were chosen based on the representativeness within the data set and their applicability to trends identified in the categorial or ordinal data. To ensure representation of the diversity of views and opinions shared, summary comments of minority views are identified and included.

To ensure respondent anonymity, responses from identity-related questions with single-choice answers were aggregated into broader categories to prevent identifiability. In questions where aggregation could not be used to prevent identifiability, the responses from the question were removed from the results and analysis.

Key Findings

Members of the Department of Physics and Astronomy on average have a positive impression of its climate, but with populations within having notable differences in experience.

This section details the most prominent findings of the survey, including the overall satisfaction with the department, demographic trends, and summaries of write in responses. The Climate within the Department section searches the demographic information for groups which experience higher or lower overall satisfaction, provide the results of how respondents' satisfaction has changed over time and summarizes write in responses providing reasons for why such a change has occurred. The Satisfaction Sentiment Analysis subsection identifies three distinguishable populations that illustrate the main themes of inclusion and acceptance in the department: the Satisfied, Ambivalent and Unsatisfied populations.

Respondents' experiences in the department are detailed in terms of their perceived levels of inclusion and acceptance, the existence of communities or spaces where department members felt excluded or marginalized, and their general sentiments toward the department. This includes a discussion on the frequency and prevalence of harassment. The final section assesses the perceived efficacy of departmental initiatives and events to either improve or promote department inclusion.

Where the data is segmented into comparisons between populations, only numerical values where the response rate is sufficiently high to avoid identifiability of individuals based on demographics are reported. The trends identified in this analysis are those that are sufficiently statistically significant based on the size of the populations within demographic subpopulation. While there may be more subtle relationships between these subpopulations and experiences within the department, the statistical power of the survey limits us to only the strongest themes.

Climate within the Department

Overall, the majority of respondents are satisfied with their experience of the UVW Department of Physics and Astronomy. Of those responding to the survey, 63% were either satisfied or completely satisfied with their experience in the department whereas 20% indicated they were either dissatisfied or completely dissatisfied. This is consistent with the climate survey of 2020, which found that 61% of the department was satisfied or extremely satisfied with their experience and 21% were dissatisfied. But these results differ from 2019 where 79% of the department was satisfied with their experience and only 7% indicated that they were dissatisfied.

Notably, there was no statistically significant difference in the distribution of satisfaction across demographic groups including gender, sexual orientation, race or ethnicity, religious or spiritual groups, ability, national origin, and language. Based on survey responses, the majority all demographic groups find department culture to be positive. However, this does not negate the distinct negative experiences of those who are dissatisfied, which we will focus on below.

63%

Respondents who were satisfied or completely satisfied with the Department Climate A majority of respondents also indicated that their satisfaction with the department stayed the same over the last 2 years (53%) but some felt that their satisfaction improved and worsened (28% and 19%, respectively). This question was not included in previous surveys but is recommended for future inclusion to longitudinally track perceived changes in experiences.

Those respondents who indicated that their experience of the department changed were also asked to share any reason for such a change, which is summarized in Table 1. Those whose

experiences improved and who also provided write-in comments mentioned themes of increased feelings of connection and familiarity with the department after the relaxation of COVID-19 related restrictions as contributing to their improved experience. Others indicated that changes to the graduate program, with the support of faculty members, made their experience better. Several responses mentioned specifically the DEI committee, their initiatives, and the current department chair as a source of their improved experience. Many of these responses indicated that although they felt that their experience was improving, there was still room for further growth.

Those who felt their experience was worsening indicated that poor treatment by faculty, in teaching and advising environments, contributed to their poorer experience. Another common theme was a sense of poor collaboration or even adversarial sentiments amongst faculty members with regards to their scholarly pursuits. Interestingly, this sentiment was also noted by several respondents who indicated that their overall experience in the department had improved, suggesting that this is a significant source of overall dissatisfaction. Others indicated that the influence of WVU administration on the department, which is amplified by the sentiments of

Improved Satisfaction

Return to in-person activities post-Covid 19 Restrictions

Department-wide Initiatives to Improve Experience

Interactions with Community and Staff

Worsened Satisfaction

Interaction with Faculty Members

Perceived Divisions within Department

TABLE 1: Factors affecting change in satisfaction with department culture.

disunity amongst faculty members, contributed to their worsened experience. Finally, some mentioned race and nationality-based discrimination as the source of their worsening experience.

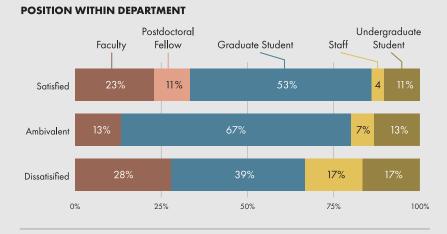
SATISFACTION SENTIMENT ANALYSIS: SATISFIED, AMBIVALENT, AND UNSATISFIED POPULATIONS

For further analysis and interpretation, we divide responses by their satisfaction with their experience in the department. By making this split, we aim to isolate sentiments, events and initiatives which provide a sense of inclusion for all populations.

Respondents who indicated that they were satisfied or completely satisfied with their experience in the department will be referred to as the 'Satisfied' population. Those who indicated that they were neither satisfied nor dissatisfied with their experience are the 'Ambivalent' population and those who were either dissatisfied or completely dissatisfied make up the 'Unsatisfied' population. We refer to this segmentation of respondents throughout the remainder of this analysis.

As mentioned above, we find no significant demographic differences between the three populations (Figure 1). However, we find that the Unsatisfied population reports distinctly different experiences, holds different sentiments about the department, and perceives departmental initiatives differently than the Satisfied population. Similarly, the Ambivalent population is largely equivocal and mirrors the sentiments of both other populations at times. Where appropriate, we will note the distinctions between these populations in the analysis below.

When asked about how their satisfaction with the department changed over time, only 84% of respondents whose satisfaction improved were also satisfied overall with the department as opposed to 12% and 4% for the Ambivalent and Unsatisfied populations. Conversely, 64% of respondents whose satisfaction worsened were dissatisfied with the overall climate, 29% were Ambivalent, and 6% were Satisfied.



GENDER IDENTITY Man Satisfied Satisfied Ambivalent Dissatisified 0% 25% 50% 7% 7% 40% 7% 100%

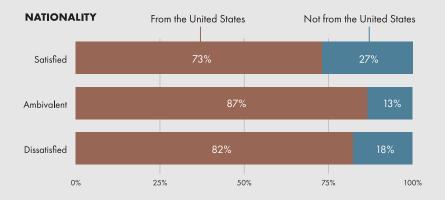


FIGURE 1: Demographics of Satisfied, Ambivalent, and Dissatisfied populations in the Department. No statistically significant demographic differences exist between the three populations.

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Experience Within the Department

The fraction of respondents who felt accepted and included by the department surpasses the satisfaction rate. Altogether, 86% of respondents felt included and accepted. This fraction is also largely independent of appointment, gender, race or ethnic group, religion or spiritual group, sexuality. Comparing the three satisfaction-based populations, there is some overlap for the satisfied and unsatisfied populations: 11% (8%) of respondents who (do not) feel included and accepted by the department also reported that they are (Un)Satisfied.

86%

Respondents who felt accepted and included within the Department.

Although many feel accepted and included in the department, 22% of respondents indicated that they found one or more communities where they felt marginalized or excluded. Those who responded that they felt excluded or marginalized by one or more communities in the department were then given the option to share which communities made them feel that way. Many indicated that interactions with faculty members was the source of their feelings of exclusion. Others identified divisions within communities, such as the faculty, graduate student community or their research group, as the source of their perceived exclusion.

Furthermore, there is a statistically significant difference in the fraction of the Unsatisfied population who indicated experiencing feelings of marginalization or exclusion when compared to the Satisfied population (Figure 2). 50% and 57% from the Unsatisfied or Ambivalent populations, respectively, indicated experiencing feelings of marginalization or exclusion, as opposed to 6% of the Satisfied population who experienced sentiments of marginalization ($p = 4.3 \times 10^{-6}$). The reported experiences of division are likely one of the reasons for the reported dissatisfaction or ambivalence reported by the populations.

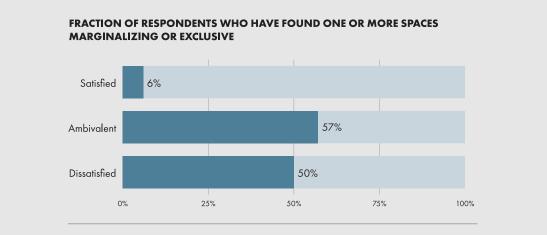
When polled about specific characteristics, respondents indicated that they felt the department was largely friendly, cooperative, and welcoming to people like themselves. Smaller overall fractions agreed or strongly agreed that the department was welcoming to people unlike themselves (68%), competitive (37%) and elitist (20%). No respondents indicated that they agreed or strongly agreed that the department was homophobic, in fact 86% disagreed or strongly disagreed. Many respondents also did not feel that the department was racist (78% disagreed or strongly disagreed) or sexist (75%).

Respondents indicated that they felt as if they largely have fair access to financial and academic support from the department, equal academic and career support from the department, fair financial support relative to their peers and equal access to scholarships. Although some respondents indicated sentiments of division and competitiveness between research groups, they also felt they receive equal support for research activities from the department. A smaller fraction felt that they had sufficient academic support from the University (56%). These sentiments were roughly constant across demographic groups as well as for those who indicated that they were not from the United States.

When asked about the adequacy of support offered by the department, 67% and 69% of respondents agreed or strongly agreed that the department provided adequate support in their future career and professional development, respectively. However, fewer respondents felt that the support offered by the department was adequate when managing effects on themselves from the University (50% agreed or strongly agreed), from national events (35%) and from global events (35%). Overall, respondents indicated that the support offered by the department is adequate but could be augmented and expanded to better help its members manage university-wide, national, and global events that impact its community members.

Harassment within the Department

When respondents were asked if they had experienced verbal, written or online harassing behaviors by someone associated with the WVU Department of Physics and Astronomy within



FRACTION OF RESPONDENTS WHO HAVE EXPERIENCED VERBAL, WRITTEN OR ONLINE HARASSING BEHAVORS BY SOMEONE ASSOCIATED WITH THE DEPARTMENT

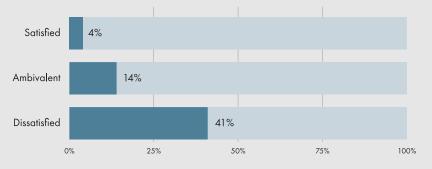


FIGURE 2: Responses with most significant variation between the Satisfied, Ambivalent, and Dissatisfied populations within the Department. The Ambivalent and Dissatisfied populations are significantly more likely to find spaces within the department marginalizing or exclusive (p = 4.3×10^{-6}) and more likely to have experienced harassment (p = 3.1×10^{-4})

the last 12 months, 11 (13%) answered in the affirmative. However, this number should not be taken as representative of the true fraction of those facing harassment. Often, due to fear of retaliation or sentiments that the harassment will not be dealt with effectively when it is reported, harassment in the workplace is underreported⁵. Therefore, this is likely a lower bound on the true rate of verbal harassment in the department. In most reported cases, the perpetrators of the harassment were identified as faculty members. There is no strong pattern in the perceived reason for the harassment but most respondents who reported experiences of verbally harassing behaviors indicated that it occurred once or twice in the past year.

Those who are feel unsatisfied or ambivalent with the department overall also reported the highest rate of verbally harassing behaviors: 41% and 14% of respondents in the Unsatisfied

Experience with harassment were identified as a key differentiator between those satisfied and unsatisfied with the department. and Ambivalent populations, respectively, indicated experiencing verbal harassment by someone associated with the department. Only 2% of respondents in the Satisfied population reported experiencing verbally harassing behaviors (Figure 2). These constitute statistically significant differences between the Satisfied and Unsatisfied populations ($p = 3.1 \times 10^{-4}$). This is likely another reason for the reported fraction of respondents who are overall dissatisfied with the department.

Several respondents also mentioned verbally harassing behaviors from faculty members in their write-in responses about changes to satisfaction with experiences in the department and feelings of marginalization or exclusion. They were identified as occurring within research groups, at faculty meetings, or online.

No respondents indicated that they had experienced physically harassing behavior by someone associated with the WVU Department of Physics and Astronomy within the last 12 months.

Department Initiatives and Events

Before asking about specific events and initiatives mentioned by the DEI Committee during the design of this survey, respondents were asked to list any events or initiatives that make them feel included (Table 2). The graduate student association, PAGSO, was mentioned in many answers as well as informal department social gatherings (including the fall picnic, events in the main office, department hike, and others) and colloquia. Positive interactions with faculty and peers were also reported as a source of inclusion. Respondents in the Unsatisfied or Ambivalent groups also reported that PAGSO and informal or one-on-one interactions with peers and faculty made them feel included.

When polled about specific department initiatives, the most respondents agreed or strongly agreed that the graduate student society, inclusion of diverse speakers at colloquia and

⁵ "Select Task Force on the Study of Harassment in the Workplace." n.d. US EEOC. <u>https://www.eeoc.gov/select-task-force-study-harassment-workplace</u>.

graduate student mentorship program contributed to the sense of acceptance and inclusion. Other initiatives which were highly regarded were the removal of written qualifiers from graduate program requirements, removal of GRE requirements for graduate admissions, and Women in Physics and Astronomy Lunch. Although they were not viewed as harming the sense of inclusion and acceptance, overall respondents felt roughly equally positive and ambivalent about the DEI Journal Club and DEI newsletter.

The Graduate Student Mentorship Program was highly favored independent of overall satisfaction.

Some initiatives were very unfamiliar to respondents. For example, 68% of respondents were unfamiliar with the First 2 Network and 59% were unfamiliar with the Indigenous Scholar Program. This unfamiliarity and the comments about positive interactions with peers and faculty members indicate the need for more departmental in reach to advertise underutilized initiatives and promote a sense of community.

Separating the responses in this category into Satisfied, Ambivalent and Unsatisfied populations tells a somewhat different story: The Unsatisfied population makes up a significant proportion of the responses who do not think the initiatives bolster the feeling of inclusivity in the department. For example, 36% of unsatisfied respondents disagreed or strongly disagreed that the DEI Newsletter makes the department feel more inclusive, as well as 31% for Diverse Speakers at colloquia, and 38% for the DEI Journal Club. Disagreeing or strongly disagreeing responses from the Satisfied population for these same initiatives ranged from 0-5%. The Ambivalent population was largely split about the initiatives, except for the Graduate Student Society (which had 75% of respondents agree that it made them feel more included), and the diverse speakers at colloquia (54%).

Initiatives which were favorable across all three satisfaction-based populations are the Graduate Student Society (80%, 70%, 75% for Satisfied, Unsatisfied and Ambivalent populations

PAGSO and informal department social gatherings were

identified as factors that made respondents feel included. respectively), Women in Physics and Astronomy Lunch (83%, 67%, 70%), Graduate Student Mentorship Program (88%, 88%, 56%), Removal of GRE requirements for Graduate Admissions (73%, 54%, 75%) and the removal of written qualifiers from graduate student program requirements (72%, 50%, 73%). Based on responses throughout the survey, a possible reason these initiatives are highly regarded is because of the opportunity for community building that they enable (as for the Women in Physics and Astronomy Lunch or Graduate Mentorship Program) or the facilitation of positive interactions with faculty members that was

Colloquium	PAGSO	Department Hike
Faculty involvement in student initiatives	Fall Picnic	Holiday Party
Positive Interactions with Faculty		Informal Social Interactions

TABLE 2: Departmental events independently identified as fostering inclusion.

required for the initiative to succeed (as in the case of the removal of GRE requirements for graduate admissions and the removal of written qualifiers).

INCLUSION AND ACCEPTANCE AT DEPARTMENT EVENTS

Respondents were polled on their perceptions of inclusion and acceptance at department events. This included more formal events (i.e., Colloquium or graduate student society meetings) and informal events (i.e., events in the main office or department parties). Overall, respondents were not only more familiar with the department events than the initiatives in the previous question but also the fraction of respondents who felt included and accepted was high. Most respondents felt accepted and included at social events in the main office, Colloquium, and the departmental parties (holiday party, potluck, and fall party) and post colloquium refreshments. The most unfamiliar events were the Graduate Student Society meetings and Undergraduate Student Society meetings: 22% and 31% of respondents, respectively, reported that they were unfamiliar with these initiatives. This is likely due to the more targeted nature of these events. However, of those familiar with the events, the majority found they felt included and accepted by them.

The Satisfied, Ambivalent and Unsatisfied populations have notable differences and similarities in their perceived inclusion at the various departmental events. Those who reported that they felt satisfied with their experience with the department also felt largely included at all departmental events. The Ambivalent population had the highest reported sentiments of inclusion at the main office social events (81%) and departmental parties (i.e., approximately 80% at the potluck, holiday party and the fall party). The Ambivalent population reported lowest feelings of inclusion at Undergraduate and Graduate Student Society meetings (50% and 60%, respectively) but these events received few responses from the Ambivalent population.

Most of the Unsatisfied population felt included at the main office social events (80%), department parties (~70% at the potluck, holiday party and the fall party), and colloquium (64%). Respondents who reported that they were unsatisfied with the department overall felt the least included at the after-colloquium refreshments (41%), Undergraduate and Graduate Student Society meetings (40% and 33%, respectively).

Sentiments of inclusion at social events in the main office are ubiquitous across populations, and therefore these events should be seen by department administrators as promising avenues for strengthening community ties.

A small number of respondents indicated resistance to the department's focus on inclusion and acceptance, finding it unnecessary, or a lack of support towards the inclusion of certain groups. These comments, however, were not representative of most community members.

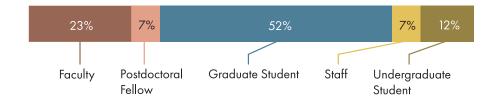
Full Survey Results

During the survey window, 92 members of the WVU Department of Physics and Astronomy responded to the Climate Survey. A breakdown of the full results is presented below.

The results from all questions that were unable to be sufficiently anonymized have been removed from this presentation of results. Where possible, results for the two largest demographic groups (Graduate Students and Faculty) have been individually presented. Percentages may not add to 100% due to rounding.

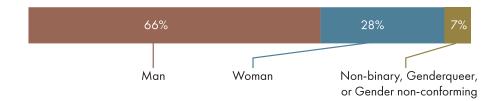
Demographics and Identity

WHAT IS YOUR POSITION IN THE WVU DEPARTMENT OF PHYSICS AND ASTRONOMY:

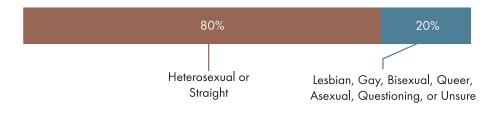


1. What is your position in the WVU Department of Physics and Astronomy?

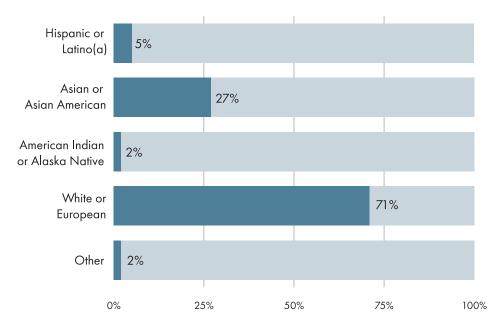
WHICH BEST DESCRIBES YOUR GENDER IDENTITY:



WHICH BEST DESCRIBES YOUR SEXUAL IDENTITY OR SEXUAL ORIENTATION:

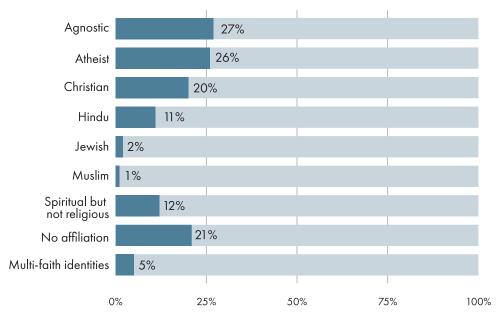


WHICH OF THE FOLLOWING RACIAL OR ETHNIC GROUPS DO YOU IDENTIFY WITH (MULTIPLE SELECTION):

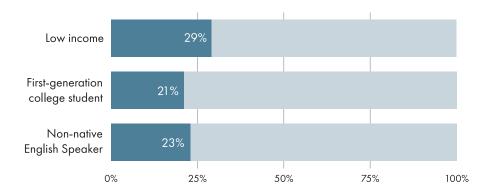


NOTE: Write in responses of South Asian are included in Asian or Asian American.

WHICH RELIGIOUS OR SPIRITUAL GROUPS DO YOU IDENTIFY WITH (MUTLIPLE SELECTION):



WHICH OF THE FOLLOWING CATEGORIES DO YOU IDENTIFY WITH (MULTIPLE SELECTION):



DO YOU IDENTIFY AS BEING FROM THE UNITED STATES?

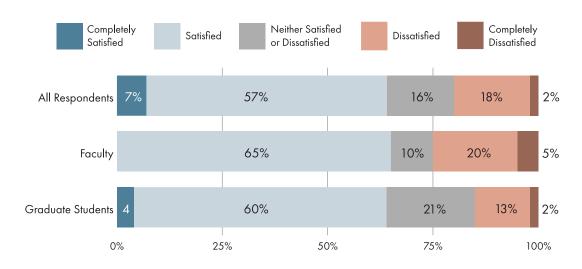


DO YOU IDENTIFY AS HAVING A DISABILITY:

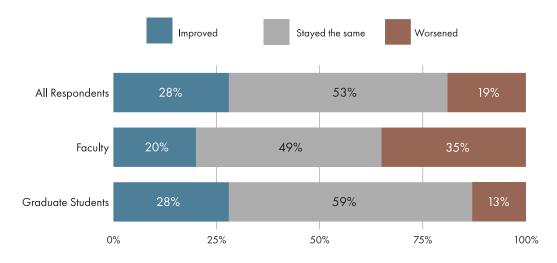


Department Satisfaction

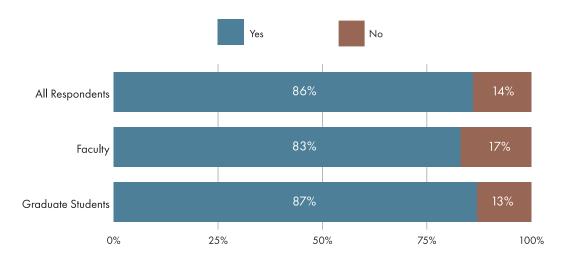
HOW SATISTIFED ARE YOU WITH THE OVERALL CLIMATE IN THE WVU DEPARTMENT OF PHYSICS AND ASTRONOMY THAT YOU HAVE EXPERIENCED IN THE PAST 12 MONTHS:



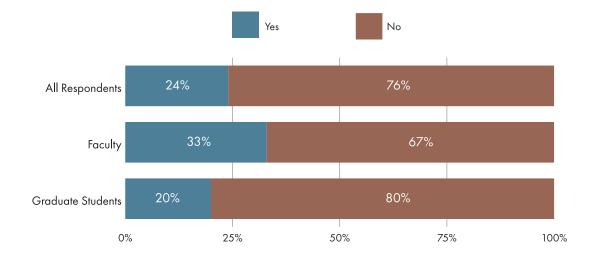
HOW HAS YOUR SATISFACTION WITH THE CLIMATE IN THE WVU DEPARTMENT OF PHYSICS AND ASTRONOMY CHANGED IN THE LAST 2 YEARS:



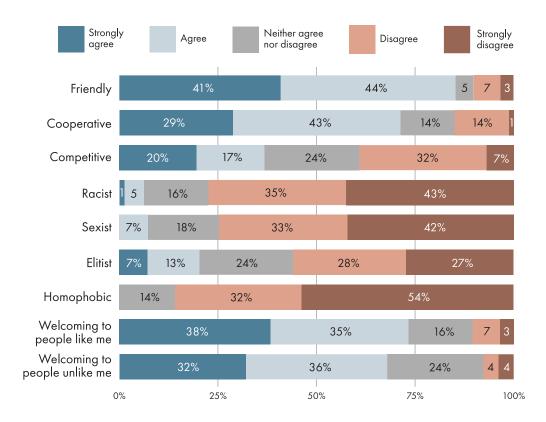
DO YOU FEEL ACCEPTED AND INCLUDED BY THE WVU DEPARTMENT OF PHYSICS AND ASTRONOMY:



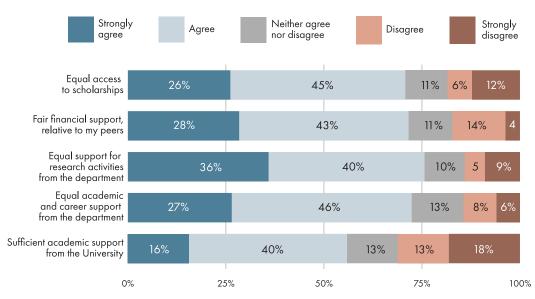
HAVE YOU FOUND ONE OR MORE COMMUNITIES, GROUPS, OR SPACES IN THE DEPARTMENT WHERE YOU FEEL MARGINALIZED OR EXCLUDED:



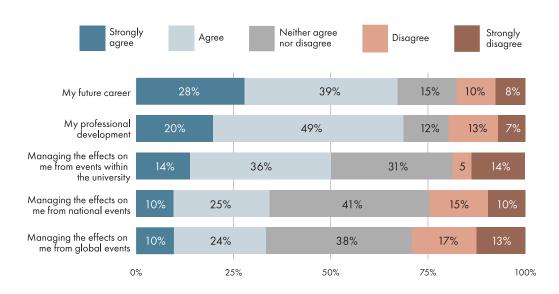
I FEEL THAT THE DEPARTMENT IS:



COMPARED TO MY PEERS AT THE SAME LEVEL IN THE DEPARTMENT, I FEEL I HAVE:

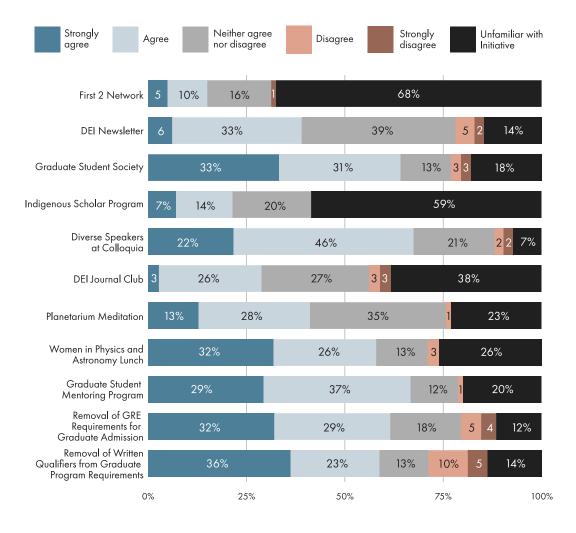


I FEEL THAT THE DEPARTMENT ADEQUATELY SUPPORTS ME IN:

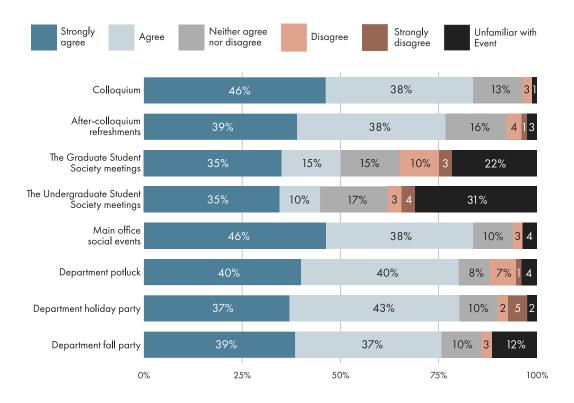


Department Activities and Initiatives

I FEEL THE DEPARTMENT CLIMATE IS MORE ACCEPTING AND INCLUSIVE BECAUSE OF THE FOLLOWING INITIATIVES:



I FEEL INCLUDED AND ACCEPTED AT:



Appendix: Survey Instrument

The following survey was provided to all members of the West Virginia University Department of Physics and Astronomy.

WVU Department of Physics and Astronomy Climate Survey 2023

Thank you for participating in our survey. Your participation is valuable to assess and improve the climate in the West Virginia University (WVU) Department of Physics and Astronomy for all of its members. Your time and candor are greatly appreciated, and we thank you in advance. We anticipate that the survey will take less than 15 minutes.

Sidrat Research, an independent third party, has been contracted by the WVU Department of Physics and Astronomy to conduct this survey. We would like to assure you that no identifiable information will be collected or shared. This includes names and IP addresses of respondents.

As for the data that we collect in this survey, the WVU Department of Physics and Astronomy will only receive aggregated and anonymized data. This means that they will not see the complete set of answers for any individual. We will ask a number of demographic questions, but the data shall be aggregated such that no particular individual is identifiable.

If you have any questions, concerns or comments, please contact us at dei@sidratresearch.com. We will respond to your emails within 2 business days.

Finally, to thank you for your participation, the final question of the survey will ask whether you would like to enter the draw. If you answer yes, you will be prompted to enter your email address. These email addresses will not be shared with third parties, and we will not send you

any communication or marketing content. Email addresses will also not be shared with the WVU Department of Physics and Astronomy and will not be stored beyond the time of the drawing.

- 1. What is your position in the WVU Department of Physics and Astronomy?
 - Faculty
 - ◯ Staff
 - O Postdoctoral Fellow
 - Graduate Student
 - O Undergraduate Student
- 2. Which best describes your gender identity?
 - Gender nonconforming
 - ⊖ Genderqueer
 - 🔿 Man
 - Non-binary
 - ◯ Questioning
 - 🔿 Woman
 - O Prefer not to say
 - O Other (please specify)
- 3. Do you identify as transgender or trans?
 - ⊖ Yes
 - O No
 - O Prefer not to say
- 4. Which best describes your sexual identity or sexual orientation?
 - 🔿 Asexual
 - 🔘 Lesbian, Gay, Bisexual, Queer
 - O Heterosexual or Straight
 - O Questioning or Unsure
 - O Prefer not to say
 - Other (please specify)
- 5. Which of the following racial or ethnic groups do you identify with? Check all that apply.
 - O Black or African American
 - O Hispanic or Latino(a)
 - O Asian or Asian American

- O American Indian or Alaska Native
- O Native Hawai'ian or other Pacific Islander
- White or European
- O Multi-racial or multi-ethnic
- Prefer not to say
- O Other (please specify)
- 6. Please check all the religious or spiritual groups with which you identify
 - Agnostic
 - Atheist
 - O Christian
 - ⊖ Hindu
 - ◯ Jewish
 - Muslim
 - O Spiritual, but not religious
 - \bigcirc No affiliation
 - O Multi-faith identities
 - O Prefer not to say
 - O Other (please specify)
- 7. Please check all the categories with which you identify
 - Low income
 - First generation college student
 - Non-native English speaker
 - A current or previous member of the U.S. Armed Forces, Military Reserves, or National Guard
 - O Prefer not to say
- 8. Do you identify as being from the United States? We are not asking for your citizenship status.
 - ⊖ Yes
 - \bigcirc No
 - O Prefer not to say
- Do you identify as having a disability? This can include Aspergers or autism, blind or low vision, deaf or hard of hearing, learning disability, ADHD, mobility condition, speech condition, and others.

- ⊖ Yes
- O No
- O Prefer not to say
- 10. How satisfied are you with the overall climate in the WVU Department of Physics and Astronomy that you have experienced in the past 12 months?
 - Completely satisfied
 - Satisfied
 - O Neither satisfied or dissatisfied
 - O Dissatisfied
 - O Completely dissatisfied
 - O Prefer not to say
- 11. How has your satisfaction with the climate in the WVU Department of Physics and Astronomy changed in the last 2 years?
 - Improved
 - Worsened
 - Stayed the same (skip to question 13)
- You have indicated that your satisfaction with your experience in the WVU Department of Physics and Astronomy has changed. If you feel comfortable, please share why. (Open Response)
- 13. Do you feel accepted and included by the WVU Department of Physics and Astronomy?
 - Yes
 No
 Prefer not to say
- 14. Have you found one or more communities, groups or spaces in the Department of Astronomy and Physics where you feel marginalized or excluded?
 - ⊖ Yes
 - No (skip to question 16)
 - O Prefer not to say (skip to question 16)
- 15. You have indicated that you have found there are one or more communities, groups, or spaces in the Department of Astronomy and Physics that made you feel marginalized or excluded. If you feel comfortable, please tell us more about these communities, groups, or

spaces.

(Open Response)

Please rate the degree to which you agree with the following statements.

16. I think the WVU Department of Physics and Astronomy is...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to say	Not applicable/ I don't know
Friendly	0	0	0	0	0	0	0
Cooperative	0	0	0	0	0	0	0
Competitive	0	0	0	0	0	0	0
Racist	0	0	0	0	0	0	0
Sexist	0	0	0	0	0	0	0
Elitist	0	0	0	0	0	0	0
Homophobic	0	0	0	0	0	0	0
Welcoming to people like me	0	0	0	0	0	0	0
Welcoming to people unlike me	0	0	0	0	0	0	0

17. Compared to peers at my same level in the department, I feel that I have...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to say	Not applicable/ I don't know
Equal access to scholarships	0	0	0	0	0	0	0
Fair financial support relative to my peers (i.e. salary, stipend)	0	0	0	0	0	0	0
Equal support for research activities from the department (i.e., funding for conferences, travel, collaborations)	0	0	0	0	0	0	0
Equal academic and career support from the department (i.e., mentorship, advisory committees, networking opportunities)	0	0	0	0	0	0	0
Sufficient academic support from the University	0	0	0	0	0	0	0

18. I feel that the WVU Department of Physics and Astronomy adequately supports me in...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to say	Not applicable/ I don't know
My future career	0	0	0	0	0	0	0
My professional development	0	0	0	0	0	0	0
Managing the effects on me from events within the university	0	0	0	0	0	0	0
Managing the effects on me from national events	0	0	0	0	0	0	0
Managing the effects on me from global events	0	0	0	0	0	0	0

19. During the past 12 months, have you experienced verbal, written, or online harassing behaviors by someone associated with the WVU Department of Physics and Astronomy?

⊖ Yes

O No (skip to question 23)

O Prefer not to say (skip to question 23)

You have indicated that you experienced verbal, written or online harassing behaviours by someone associated with the WVU Department of Physics and Astronomy in the last 12 months. We would like to ask you more questions about your experience. These questions are entirely optional, please only tell us the information you feel comfortable disclosing. We value your response even if you do not feel comfortable answering any additional questions.

First we would like to remind you that your responses will be anonymized and aggregated before the WVU Department of Physics and Astronomy receives them. Please also note that we will not forward your individual answers to the WVU Department of Physics and Astronomy or the WVU administration.

- 20. To the extent that you are comfortable answering, do you feel that you have experienced these behaviors due to the following identities or attributes? Mark all that apply.
 - I experienced this, but I don't know if it was because of a particular identity or attribute
 - Yes, my racial or ethnic identity
 - Yes, my gender identity or gender expression
 - Yes, my sexual orientation

- Yes, my religious identity
- Yes, my ability or disability status
- Yes, my socioeconomic status or social class
- Yes, my age
- Yes, my height or weight
- Yes, my veteran status
- Yes, my national origin or citizenship status
- Yes, my accent or the way I speak
- Yes, my health status or medical condition
- 21. How frequently have you experienced these harassing behaviors during the past 12 months?
 - Once or twice
 - Once a month or less
 - Two or three times a month
 - Once or twice a week
 - O Three to five times a week
 - O Nearly every day, or every day
- 22. At the time of these events, what was the relationship between you and the people who behaved in harassing ways toward you? Mark all that apply.
 - O Teacher, instructor, TA
 - Someone I was teaching or advising
 - Classmate
 - Someone in my lab or research group
 - Co-worker, colleague
 - Did not know or recognize this person
 - O Advisor, mentor, dissertation advisor
 - O Boss or supervisor
 - Other (please specify) _____
- 23. During the past 12 months, have you experienced physically harassing behaviors by someone associated with the WVU Department of Physics and Astronomy?
 - ⊖ Yes
 - No (skip to question 27)
 - O Prefer not to say (skip to question 27)

You have indicated that you experienced physically harassing behaviours by someone associated with the WVU Department of Physics and Astronomy in the last 12 months. We would like to ask you more questions about your experience. These questions are entirely optional, please only tell us the information you feel comfortable disclosing. We value your response even if you do not feel comfortable answering any additional questions.

First we would like to remind you that your responses will be anonymized and aggregated before the WVU Department of Physics and Astronomy receives them. Please also note that we will not forward your individual answers to the WVU Department of Physics and Astronomy or the WVU administration.

- 24. To the extent that you are comfortable answering, do you feel that you have experienced these behaviors due to the following identities or attributes? Mark all that apply.
 - I experienced this, but I don't know if it was because of a particular identity or attribute
 - Yes, my racial or ethnic identity
 - Yes, my gender identity or gender expression
 - Yes, my sexual orientation
 - Yes, my religious identity
 - Yes, my ability or disability status
 - Yes, my socioeconomic status or social class
 - Yes, my age
 - Yes, my height or weight
 - Yes, my veteran status
 - Yes, my national origin or citizenship status
 - Yes, my accent or the way I speak
 - Yes, my health status or medical condition
- 25. How frequently have you experienced these harassing behaviors during the past 12 months?
 - Once or twice
 - Once a month or less
 - O Two or three times a month
 - Once or twice a week
 - O Three to five times a week
 - Nearly every day, or every day
- 26. At the time of these events, what was the relationship between you and the people who behaved in harassing ways toward you? Mark all that apply.

- O Teacher, instructor, TA
- Someone I was teaching or advising
- Classmate
- \bigcirc Someone in my lab or research group
- Co-worker, colleague
- \bigcirc Did not know or recognize this person
- O Advisor, mentor, dissertation advisor
- \bigcirc Boss or supervisor
- O Other (please specify)
- 27. Can you list any events or initiatives that make you feel included and accepted in the WVU Department of Physics and Astronomy? (Open Response)

Please rate the degree to which you agree with the following statements.

28. I feel that the department climate is more accepting and inclusive because of the...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	l am not familiar with this initiative	Not applicable/ I don't know
First 2 Network	0	0	0	0	0	0	0
DEI Newsletter	0	0	0	0	0	0	0
Graduate Student Society	0	0	0	0	0	0	0
Indigenous Scholar Program	0	0	0	0	0	0	0
Diverse Speakers at Colloquia	0	0	0	0	0	0	0
DEI Journal Club	0	0	0	0	0	0	0
Planetarium Meditation	0	0	0	0	0	0	0
Women in Physics and Astronomy Lunch	0	0	0	0	0	0	0
Graduate Student Mentoring Program	0	0	0	0	0	0	0
Removal of GRE Requirements for Graduate Student Admission	0	0	0	0	0	0	0
Removal of Written Qualifiers from Graduate Student Program Requirements	0	0	0	0	0	0	0

29. I feel included and accepted at...

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	l am not familiar with this event	Not applicable/ I don't know
Colloquium	0	0	0	0	0	0	0
After-colloquium refreshments	0	0	0	0	0	0	0
The Graduate Student Society meetings	0	0	0	0	0	0	0
The Undergraduate Student Society meetings	0	0	0	0	0	0	0
Main office social events (e.g. snowflake cutting and decorating, holiday tree decorating, etc.)	0	0	0	0	0	0	0
Department potluck	0	0	0	0	0	0	0
Department holiday party	0	0	0	0	0	0	0
Department fall party	0	0	0	0	0	0	0

Thank you for your participation in the WVU Department of Physics and Astronomy's 2023 Climate survey. We value your responses, and will faithfully represent the diversity of views from the WVU Physics and Astronomy community in our report.

30. If you have chosen to enter the draw, please enter your email here. We will be notifying the winners by the end of June 2023.(Open Response)

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