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Diversity, Equity, and Inclusion Round Table at the Joint Observatories Kavli Science Forum

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A diverse workforce and inclusive workspaces are critical to the advancement of science and the future of our astronomical community. Unfortunately, long-standing structural barriers prevent individuals from underrepresented groups from being fully and comprehensively represented, especially in the later stages of the career path.

As part of the Joint Observatories Kavli Science Forum, a hybrid three-hour round table was held at ESO headquarters in Chile on 27 April 2022 to exchange views on the challenges of incorporating diversity, equity, and inclusion (DEI) into the astronomical community. This article summarises the key discussions, contributions, and valuable feedback from that conversation. The panel was composed of a variety of DEI experts from Chilean observatories and organisations. Specifically, the panel included Alysha Shugart (Science Operations Specialist and diversity advocate at NOIRLab and AURA, Chile), Julio Carballo Bello (President of the Chilean Astronomical Society, SOCHIAS), Sonia Duffau (Outreach and Diversity Officer at AUI, Chile), and Steve Margheim (astronomer and member of the NOIRLab DEI Task Force).

The discussion was divided into four main sessions. First, we characterised our astronomical community based on a recent survey conducted by SOCHIAS. Second, we reflected on the underrepresentation of women and minorities in astronomy, especially in the later stages of their careers, and what is lost when the community remains unbalanced. This was followed by a brainstorming session on how to inspire, encourage, and retain women and minorities. Third, we discussed how observatories in Chile should be operated from a multicultural perspective. In this context, we emphasised the importance of working with communities near the observatories and involving them in outreach and diversity efforts. Finally, we discussed how to increase the importance of DEI in astronomy, which led to a lively debate about whether recruitment policies or training should be mandatory and who has the primary responsibility (individuals or organisations) to drive the necessary changes to ensure more inclusive institutions.

Characterising our astronomical community

Julio Carballo Bello opened the first session of the round table by presenting the results of a recent survey aimed at characterising the Chilean Astronomical Society, identifying possible problems and finding solutions. He shared demographic data that showed a significant disparity in the age distribution of men and women. The number of women, who dominate the outreach, graduate, and postgraduate student groups, decreases dramatically after the age of 40. The survey also found that 85% of participants who felt discriminated were women, 9% were non-binary, and 6% were men. While the former felt discriminated mainly because of their gender, men were more affected by social interactions and cultural differences. In addition, 20% of those who felt discriminated also felt attacked.

Following this presentation, there was some reflection on the astronomical community and the diversity of ways in which individuals can engage with it. It was agreed, however, that those who have not pursued an academic career or do not hold a PhD are not fully included. With this in mind, it was emphasised that our community is much broader, the vast majority of individuals working at observatories belonging to a wide variety of disciplines but still critical to our mission. It was stressed that it is necessary to explicitly encourage undergraduates to see the career path as a giant tree, of which only one branch ends up as a professor, at the same time adapting the curriculum to provide them with a wider and more useful skill set.

Finally, it was noted that we have very hierarchical structures and that avoiding designations could pave the way towards flatter and more inclusive organisations. Awareness and empathy were identified as the main reasons why feeling discriminated depends on belonging to a minority group. We are more likely to empathise with another person when we experience similar difficulties ourselves.

Gender and minorities within the astronomical community

The second session was introduced by Sonia Duffau, who briefly presented PROVOCA, an initiative to promote STEM careers among underrepresented groups by working with local communities and developing a mentoring programme. PROVOCA focuses on women, as that allows many other minorities to be reached because of their 'intersectionality' — the extent to which women are also included in other disadvantaged groups on the basis of, for example, ethnicity, sexuality, class or religion.

There was much discussion in this session about how to make committees more diverse without increasing the workload of the few minority representatives in higher positions. Some participants felt that it was important to accept these committee positions, recognising that some individuals may have to make something of a sacrifice by devoting significant amounts of their time to representing a given minority for the good of the community during a transition period. Others found it burdensome and detrimental to devote their time to such tasks instead of to research. In this framework, some solutions and considerations were proposed. First, many contributors underlined the need to reconsider candidates' 'requirements'. Rather than selecting from a pool of high-status women, minorities, and even men who are at a mature stage in their careers, we could select younger researchers for those panels or committees. Second, it was felt advisable to identify who else could holistically represent minority perspectives. Third, it was suggested that the power of selection be removed from the leadership by filling the positions through open calls. Finally, it was stated that we, as scientists, should educate ourselves, be aware of our own biases, and include everyone in the process, training and discussions.

Multicultural perspective: operating observatories in Chile

The third session began with Steve Margheim sharing how, while promoting the work on DEI, he has found that the burden of improving things seems to fall predominantly on the people who are most affected. DEI meetings are mainly attended by minorities, who are expected to come up with solutions; and given the low priority often accorded to such things, their efforts may even count against them. Therefore, in order to create diverse, equitable, and inclusive workplaces, institutional boards and executives need to understand and internalise that fundamental change is required for the entire structure to work.

Some participants shared the view that while the criterion typically used to evaluate a scientist's productivity (the h-index; see Fraumann & Mutz, 2020) is valuable, it does not prove everything. In this respect, it was also stressed that being grateful to our colleagues who dedicate a large part of their time to DEI is not enough. In fact, it was recommended that engagement should explicitly count with DEI as an accomplishment so that it could be career-enhancing.

With this in mind, organisations such as the Carnegie Institution for Science require grant recipients to both show interest in DEI and have a mindset that aims to bring about change. The goal is to officialise that fairness and working towards improving the community are expected and that you are also being evaluated on the basis of them. The other idea behind this is to progressively propagate this fair and inclusive mindset to higher levels. Additionally, NOIRLab has established that 3% of all employees' working time can be devoted to DEI initiatives, which means that DEI is now part of the performance evaluation process. Similarly, in order for our institutions to work in a broader community, we should also engage with the communities in which we are geographically located. We should understand their needs, their culture, and the environment in which an observatory is located, and we also need the community to engage with the mission of the observatory.

How to make DEI as important as the science we do

The final session of the round table began with Alysha Shugart summarising her experiences and lessons learned as a DEI advocate. She emphasised the importance of making any training or dialogue personal to the audience if we want them to get involved and the conversation to be effective.

In this regard, there was discussion about whether the driving force should be equity or diversity-derived benefits, and whether the responsibility should lie with individuals or organisations. It was noted that institutions that do not care enough will lose talent and will be left behind, but also that our organisations should reflect a society in which everyone has a voice and feels invited.

It was also reported that an analysis of many organisations has shown that the most successful ones are those that have DEI embedded in their mission. In this sense, the need to practice inclusion, hire empathetic leaders, and leverage the power of the solid mandates imposed by the leaders was pointed out. The importance of finding tools for accountability was also highlighted, because only when we have clear reports on the actions taken can we demand progress.

Finally, we reflected on the fact that we have grown up in a biased culture, which means we all need these trainings, conversations, and awareness-raising. Likewise, the need to be proactive and self-educate was emphasised.

This round table was a great success overall, providing an open space with a climate of respect, consciousness, and active listening where a frank exchange of views could take place. It served as a forum to discuss barriers, thoughts, lessons learned, tools, and best practices for creating a more diverse, equitable, and inclusive environment in both science and observatories.

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References

Fraumann, G. & Mutz, R. 2020, in Handbook Bibliometrics, ed. Ball, R. (Berlin, Boston: De Gruyter Saur), 169

ESO/S. Guisard (www.eso.org/~sguisard)

ESO Photo Ambassador Stéphane Guisard captured this astounding panorama from the site of ALMA, the Atacama Large Millimeter/submillimeter Array, in the Chilean Andes. The 5000-metre-high and extremely dry Chajnantor plateau offers the perfect place for this state-of-the-art telescope, which studies the Universe in millimetre- and submillimetre-wavelength light.