

European Astronomical Society Working Group on Ethics report

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Framework

The Ethics Working Group was appointed by the Council of the EAS to consider ethics in our profession and provide recommendations for good practices aimed at making our community a fair and inclusive place.

The nine members of the Working Group were chosen to represent the diversity in European astronomy, in terms of gender, career stage, national and racial background, etc.

The present document summarizes the findings of the Ethics Working Group and provides a number of recommendations. Part I is the ethics statement that we are recommending the European Astronomical Society (EAS hereafter) to adopt. Part II lists a number of recommendations of good practice in a number of aspects in our profession. This is a document we suggest the EAS to endorse and disseminate in the community.

Part I: Ethics statement

The mission of the European Astronomical Society is to promote and advance astronomy in Europe. To best pursue this endeavour, we provide ethical guidelines for EAS members, and more generally for individuals involved in the professional astronomical community. The EAS welcomes and respects all its members, regardless of race, ethnic origin, religious belief, gender, gender identity, sexual orientation, disability, age, or family and socio-economic status. It strives to create an inclusive environment where all members can grow as scientists, contribute to their fullest potential to the advancement of astronomy and be afforded equal opportunities to move forward in their careers.

All scientists should act ethically in their capacity as researchers, teachers, educators and mentors and should be aware of their responsibility of training students and young scientists in ethical conduct.

The following points describe the minimal ethical standards expected by the EAS. A more detailed list of recommended good practices is available in a companion document.

Conduct towards others

All professional interactions should be conducted with consideration and respect. This includes, but is not restricted to, interactions with other scientists, senior or junior colleagues, direct subordinates (e.g., post-docs, students, mentees, other group members), administrative, technical or other support staff, and members of the public, media, government, or funding agencies.

Abusive, intimidating, humiliating or demeaning behaviour is not acceptable under any circumstances. Maximum effort should be put into creating an inclusive, supportive, and stimulating working environment, where people feel included, welcomed and valued. Free expression and a healthy discussion and exchange of scientific ideas should be encouraged at all levels.

Equal opportunity and treatment should be afforded to all colleagues, regardless of gender, race, ethnic and national origin, socio-economic background, political affiliation, religion, age, marital status, sexual orientation, disability and any intersection thereof, and any other reason not related to scientific merit.

The workplace should be a harassment-free environment.¹ Harassment includes, but is not limited to, sexual harassment, racial harassment, harassment based on real or perceived gender identity or sexual orientation, ableist harassment, physical harassment, verbal harassment, and bullying. Because of intersectionality, these different forms of harassment often occur simultaneously. Power dynamics are also a vital aspect of harassment and bullying, and must be acknowledged and taken into account when developing anti-harassment policies to ensure that those in positions of relatively little power, such as undergraduates, graduate students, postdocs, staff, and junior faculty can report harassment by their superiors safely and without fear of reprisal.

The EAS, in the case of repeated and/or serious instances of inappropriate behaviour, may take measures against offending parties, which may include expulsion from a conference or from the Society.

Research

Research should be conducted with honesty and integrity. Data collected using large, publicly funded facilities should be analysed, made available and published in a timely manner, as should the results of publicly supported studies.

Access to data, public or private, should be clearly acknowledged. Appropriation of unpublished data and results without explicit permission and attribution, or the fabrication or selective reporting of data and/or results with the intent to deceive or mislead, are unethical behaviours that should not be tolerated. Honest errors should be promptly acknowledged and corrected as soon as they are detected.

Publication and authorship

Authorship of publications is the primary means of assigning credit for work done. Therefore, the author list should include all, and only, individuals who have contributed significantly to the research or work reported in such publications. All authors share responsibility for the content of the publication and should have the opportunity to review the document before its submission. Moreover, all authors are responsible for promptly providing corrections or retractions in case an error is found. Minor contributions to the work, as well as sources of financial support should be acknowledged and disclosed. Proper attribution of work of others should be given, typically in the form of a full and correct citation of relevant research and publications. Use of data obtained from others or from public databases should be fully acknowledged. Plagiarism, that is claiming the words or ideas of another as one's own without referencing their source, is unethical and unacceptable. These statements apply not only to scholarly journals but to all forms of scientific communication including but not limited to press releases, proposals, websites, popular books, social media and podcasts.

¹For the purpose of this document we adopt the definition of harassment adopted by the International Astronomical Union (see <https://www.iau.org/news/announcements/detail/ann16007/>).

“In general, harassment is a conduct that exerts unwelcome pressure or intimidation. This conduct includes, but is not limited to: epithets, slurs or negative stereotyping; threatening, intimidating or hostile acts; denigrating jokes and display or circulation of written or graphic material that denigrates or shows hostility or aversion toward an individual or group.

Particularly serious is the sexual harassment that refers to unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature. Because of the wide international nature of the IAU, it is important to realize that behaviour and language that are welcome/ acceptable in one particular cultural environment may be unwelcome/offensive to another. Consequently, individuals must use discretion to ensure that their words and actions communicate respect for others. This is especially important for those in positions of authority since individuals with lower rank or status may be reluctant to express their objections or discomfort regarding unwelcome behaviour.”

Peer Review

Review of manuscripts prior to publication, research and funding proposals and evaluation of colleagues for career advancement is an essential component of the scientific process. Referees have a special responsibility to act in a fair, considered, confidential and well-justified manner. Conflicts of interest should be disclosed and treated according to the rules provided by the organization or institution promoting the activity. The use of any advantage obtained by means of acting as a reviewer is unethical and unacceptable.

Conflict of interest

Conflicts of interest are situations where, to an impartial observer, decisions could appear to be influenced by factors outside of the merits of the case. Possible conflicts of interest include, but are not limited to, situations where the outcome of a selection or deliberation will affect the current or future status of an individual directly involved in the process or of someone professionally or personally close to them. This applies, for instance, to decisions influencing publication acceptance, allocation of financial support, telescope and/or super-computing time, awarding prizes, recruiting, hiring and selecting speakers for conferences or meetings.

Management of conflict of interest is generally regulated by the organization or institute operating the activity, and participants should naturally adhere those rules. We recommend, however, that participants should withdraw from the activity whenever possible and practice full disclosure at all times of any perceived conflict of interest.

Part II: Guidelines for good practice

1 Conduct towards others

Professional activities and interactions should be carried out with the utmost respect and consideration for other scientists at any stage of their career (i.e., students and junior scientists, peers, supervisors and senior colleagues), and any other individuals or groups encountered in work-related situations (e.g., administrative and technical support personnel, outreach and media professionals, members of the public). Specific recommendations in this context are as follows.

- Work interactions with colleagues and others should be conducted observing ethical practices and principles. Other colleagues should be motivated to act in ethical ways in their professional interactions.
- Efforts should be made to educate oneself and be aware of any possible unconscious biases and prejudices and of different habits/thresholds for inappropriateness and offensiveness in different cultures.
- It is a special responsibility to educate/train subordinates on ethical practices of our profession, on the promotion of inclusiveness and on the existence of unconscious bias, including by our own actions and examples.
- Supervisors and supervised scientists should aim for a professional and respectful relationship, acknowledging their own roles and responsibilities with one another and their common research effort.
- The best possible teaching and mentoring should be offered to students and researchers in their education, training and career advancement, regardless whether they plan on leaving academia.
- Conflicts of interest should be managed according to the rules provided by the institution/organization managing the activity at hand. In any case, full disclosure of the conflict of interest is the minimum action to be taken. Individuals in close personal relationships

(romantic involvements, family ties, etc.) should disclose this and recuse themselves from supervising positions and any possible decision influencing the situation (acting as referees, writing recommendation letters, nominating for prizes, etc.)

- Inappropriate, aggressive or offensive behaviour, bullying and harassment by an individual or a group against another should not be tolerated. Every effort should be made to make it stop immediately and prevent it from reoccurring. Measures to deal with it are regulated at the institutional or national level, and they should be widely advertised among the community they apply to. Every individual should acquaint oneself with the rules and by-laws pertaining to their institution, professional association or country, including the course of action to take when encountering inappropriate behaviour.
- Institutions should disseminate among its employees these and/or similar guidelines, including national, local, and institutional regulations and the European Charter for Researchers².

2 Organization of and professional conduct at conferences and meetings

Conferences, workshops and meetings have a fundamental role in the dissemination of scientific knowledge, in establishing and strengthening collaborations, and in offering networking opportunities. It is therefore paramount to implement policies that showcase the best science while minimizing the effect of biases of any sorts. Organizers and participants should strive to promote a climate of inclusiveness and respect. The following four subsections deal with specific recommendations.

2.1 Organization of meetings, choice of programme and venue

All conference organizers, and specially those of the yearly EWASS event, are advised to follow the recommendations below:

- Scientific merit is to be among the top selection criteria for speakers. In order to minimize conscious and unconscious bias, scientific organizing committees are recommended to prepare an extended list of potential speakers that can later be analyzed in terms of gender/national/personal biases. If needed, the organizers should consider actively seeking contributions from under-represented parts of the astronomical community in an attempt to reach a balance that at least represents the diversity in the field of research.
- Helping with childcare solutions is encouraged. Options may include providing a list of local childcare providers, a childcare programme organized on site, and/or a room in the conference venue from which parents with children can follow the talks in a more relaxed environment. Social media platforms (like Twitter) with a dedicated hashtag might also help people outside the main conference hall to follow the essential parts of the discussions.
- Venue selection should take into account accessibility and the existence of appropriate infrastructure to address the needs of potential disabled participants.
- Clear guidelines for presenters should be provided, including the time available for talks and questions, poster sizes appropriate for the venue, as well as information on projected image size to allow speakers to prepare optimal slides. Presenters should be encouraged to use colour palettes and fonts that are suitable for colour blind and dyslexic participants.
- Meetings organizers are advised to adopt a code of conduct for the meetings and to widely advertise it before the meeting. The section below “*Conduct of participants*” could be adapted to suit the needs of a specific meeting.

²<https://euraxess.ec.europa.eu/jobs/charter>

2.2 Conduct of chairs

The following practices for chairing are recommended to improve the climate and the participation of minorities and young scientists in the discussions throughout the conference.

- In the introductory remarks of each session, young scientist should be explicitly encouraged to participate and during Q&A sessions, given priority in asking questions.
- Chairs are encouraged to be conscious of their biases and avoid preferentially selecting some people and/or paying attention to only some parts of the room.
- Questioners should be reminded to identify themselves by name.
- If the questions are posed in an aggressive manner and/or the questioner and/or speaker gets aggressive, the chair should be prepared to interrupt.
- All speakers should use a microphone: non-native English speakers tend to struggle more if a microphone is not used.
- If possible, Q&A sessions should not be interrupted before at least four questions have been asked, as to minimize the effect of bias in selecting questions. To this end, sessions organizers should schedule enough time for questions and speakers should not be allowed to run over time.

2.3 Conduct of participants

EWASS and all astronomy conferences and meetings should be places in which researchers are encouraged to have a free discussion, and a free exchange of ideas and scientific results. All attendees are expected to behave professionally and treat each other with respect for the duration of the meeting and in all activities related to it. Ideas and results must be respectfully discussed based solely on their scientific merits. Participants are advised to be mindful and respectful of cultural differences between the participants. Many countries with very different cultural backgrounds are part of EAS, and it is every participant's duty to make sure everybody feels welcome in our society.

The EAS firmly rejects all kind of abusive behaviour. Conferences organizers are advised to work towards providing a welcoming, safe environment that encourages the free expression and exchange of scientific ideas of all the participants. Every attendee is expected to make their individual contribution towards a respectful and inclusive meeting climate. Any discriminatory behaviour against colleagues on any basis, such as gender, gender identity, race, ethnic background, national origin, religion, political affiliation, age, marital status, sexual orientation, disabilities or any other reason will not be tolerated during the conference and in any event related to it.

2.4 Dealing with bullying, harassment or aggression at meetings

The organizing committees are recommended to appoint one or more people to act as contact points for reporting instances of bullying, harassment or aggression. These people should be aware of the code of conduct of the meeting, and of the avenues to follow to report incidents. They should also be prepared to advise attendees on how to deal with hostile situations and incidents. In case they are contacted about such an event, and with the approval of the reporting person, they should be willing to approach the offending person(s) to discuss how their behaviour is causing distress to other participants and remind them of the code of conduct applicable to all participants. If more serious measures are needed, the contact points should inform the reporting person(s) of the procedure to follow in these cases, pursuant to the rules and regulations of the meeting.

Should a participant witnesses events of bullying, harassment or aggression, the recommendation is to approach the victim to show support, ask how they are doing, and possibly suggest them to talk to one or more of the contact points. The decision to approach the contact points should, however, ultimately be left to the victim.

3 Fair recruiting

Recruitment and selection guidelines are meant to ensure that the most suitable person for the job, at the right time, and on the basis of their relevant competences (scientific, technical and soft skills) is chosen. It is thus important that the procedure is open, fair and consistent. Vacancy notices should aim at reaching as wide a pool of potential applicants as practicable, describing clearly the role profiles and their technical and behavioural competences. Furthermore, the hiring entity is responsible for ensuring that staff appointed are qualified to carry out the specified duties and that interviews are carried out by suitably competent staff members.

In order to attract and retain a diverse pool of candidates and hires, it is highly advisable to develop clear guidelines and offer support schemes for dual-career arrangements that are compatible with inclusiveness/diversity.

More specifically, in order to ensure fairness and transparency, we recommend the following good practices, applicable throughout the process.

Search, recruiting and hiring committees

- Committees should include members with different perspectives and expertise, and with a demonstrated commitment to diversity where practicable. They should include women and underrepresented minorities whenever possible.
- Hiring criteria should be directly related to the requirements of the position, clearly understood, and accepted by all members of the committee.
- Whenever possible, committees should consider postponing or re-advertising openings with too few qualified applicants
- It is good practice for the committee to discuss and agree on the structure, running order and questions/broad areas of questioning for each member ahead of interviews.

Selection criteria

- Selection criteria and procedures for screening and interviewing candidates should be explicitly established and recorded before advertising the position.
- The appointing institution and the committee should be notified of all possible conflicts of interest of each committee member with respect to each applicant.
- All applicants should be assessed against the same criteria to ensure that each of them receives an equal opportunity.
- The ability of the candidate to add intellectual diversity to a given department/institute should typically be taken into consideration when selecting candidates.

Reviewing applications and final decision

- The committee should discuss the potential impact that evaluation bias could play to produce an unfair and inequitable recruiting process and commit to implement practices that will mitigate it.
- Only the candidate's ability to perform the essential functions of the job should be considered and assumptions based on personal perceptions avoided.
- The final discussion of the candidates should remain focused on the search criteria and evidence about the qualifications of the candidates for the position.

4 Widening the access to our profession

The EAS values the geographical, socio-economic, ethnic, gender and sexual orientation diversity in the astronomical community and the way such diversity enhances the potential of astronomy. Thus, widening the access to our profession to people from backgrounds that have traditionally been less or poorly represented in our profession is an essential effort the community needs to make. This effort will allow our profession to develop in its full potential. We expect this effort to create social equality and to allow for an inclusive environment that expands the culture of the profession and promotes creativity and productivity driven by the diverse workforce.

The following recommendations are motivated in part by the European Charter for Researchers³ and by the “Nashville Recommendations⁴”, to which the interested reader is referred for more details.

- We recommend that all European nations strive to level the playing field in education. That is, making an effort to eliminate educational systems where only the most privileged students receive the best, high-quality education while those from underprivileged backgrounds have limited opportunities.
- National astronomical societies, universities, higher education organizations and research institutions are encouraged to organize programmes and events to engage the general public and attract prospective students with diverse backgrounds and talents. Outreach programmes aimed at boosting the confidence level of underprivileged and underrepresented potential students are also advisable.
- Universities, higher education organizations and research institutions are encouraged to support programmes that foster partnerships with organizations that work with students from disadvantaged background, women and minorities.
- Universities, higher education organizations and research institutions should consider developing mentoring programmes by recruiting and training mentors with diverse backgrounds and competencies to best match mentees from any groups, including women and minorities. This enables the mentees to reach their goals effectively and build a network.
- It is important that Universities and higher education institutions strive to remove or minimize financial barriers to undergraduate and graduate study programmes for candidates from underprivileged socio-economic background.
- Educational resources, research products and facilities should be fully accessible to people with disabilities.
- European employers, government programmes and/or funding agencies should encourage mobility within and outside Europe and recognize the positive impact of mobility in enhancing scientific knowledge and professional developments.
- We recommend European countries simplify unfairly complicated visa processes for non-European citizens, especially those from developing countries.
- We recommend that National societies, Universities, higher education and research institutions include minorities directly in policy-making and ensure fair representation in leadership roles to all groups.
- Universities, research institutions and higher education organizations should make an effort to regularly organize initiatives aimed at improving climate and inclusiveness (e.g, impostor syndrome and unconscious bias workshops, sensitivity training, discussions on topics such as demographics in astronomy, or inappropriate and unwelcome behaviour)
- We recommend that Universities make regular assessments of their actions taken in widening access by regularly collecting and analyzing data to continuously improve upon these activities and assist policy developments and implementations. Widening access ultimately generates a diverse pool of talent.

³https://euraxess.ec.europa.eu/sites/default/files/am509774cee_en_e4.pdf

⁴<https://aas.org/posts/news/2016/01/inclusive-astronomy-january-2016-aas-meeting>

5 Recommendations for fair employment practices

The European Union has taken the lead over the past years in defining and recommending employment conditions for researchers, in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers:

"While the Charter describes the working relationship between researcher and institution, by setting out the roles, rights and responsibilities of researchers, the Charter and Code ensures that the selection process for hiring and promoting researchers is fair, merit-based and transparent."

The specific recommendations in this context:

- That employers and funding agencies in our field implement the recommendations in the European Charter for Researchers the Code of Conduct for the Recruitment of Researchers. and documents and that all researchers familiarize with the and that employers and funding agencies in our field implement the recommendations in these documents.
- That non-European countries take inspiration from these documents, and implement comparable employment rights for researchers working within their purviews.
- That all researchers, including PhD students, be employed under employment contracts that ensure full benefits, including healthcare, pension, maternity/paternity leave, and unemployment and disability benefits.
- That national policies, employers, and funding agencies recognize the existence and importance of trans-national mobility, and that they ensure that researchers and their families enjoy the same rights as local employees, including access to and portability of the full set of social security provisions.
- That both researchers and their supervisors are aware of their status as employees and possibly employers, and that their working relationship is governed by their corresponding rights and obligations.

6 Ethics in publishing

Publications are one of the main products of our professional activity and they are regulated by the specific ethics policies of the journals. Here we provide, however, a more general set of recommendations for good practice.

- Open access: All published work, including data and software, should ultimately be publicly available for free. Control of copyright should rest either with the authors, with reputable learned societies, or be in the public domain. The EAS council recommendations on open access should be followed⁵.
- Publication of data and software: Data and software used in publications should be published in a reliable public repository at the same time as the article in which they are used.
- Journals: Publication of scientific research conducted with public funding should not be used to extract excessive private profits. While private journals can play an important role in scientific publication, support for new private journals should be carefully considered in terms of the weakening of society journals and what the primary motivation is for setting up a new private journal.
- Plagiarism: Plagiarism is claiming the words or ideas of another as one's own, i.e., without referencing their source. Plagiarism is misconduct.
- Originality/multiple submissions of the same work: Research publications should be original and should not contain reproduced material unless explicitly noted.

⁵<http://eas.unige.ch/documents/OAPublicationRecommendations.pdf>

- Authorship: The primary means of assigning credit for work done is via authorship of publications. This means that authorship is crucial for peer recognition and career advancement. Authorship must therefore be assigned in a fair manner, commensurate with contribution, and signal clearly the role played by each contributor to the work. Assigning authorship inappropriately is misconduct.
- Attribution of work: Appropriate recognition of prior work is essential both for the reader to understand the full origin and background of the research and for peer recognition of researchers. Proper attribution typically takes the form of a full and correct citation of relevant research and should be followed rigorously in the scientific literature.
- Peer review: Review of manuscripts prior to publication is essential to the reputation and reliability of the scientific literature. Referees have a special responsibility to act in a fair, considered, and well-justified manner when reviewing papers for publication. Editors must actively ensure that the reviewing process is fair and appropriate.
- Conflict of interest: Research evaluators (e.g., referees or editors) with a conflict of interest should recuse themselves from the evaluation. Where this is not possible or desirable, the conflict of interest should at least be clearly indicated to affected parties. Researchers with a conflict of interest have a primary obligation to ensure that the conflict does not affect their impartial judgment with respect to their research, and must declare publicly the nature of the conflict of interest.