Leibniz-Institut für
Astrophysik Potsdam

Good Scientific Practice at the AIP

Part A: Principles

Preamble

The members of the AIP are committed to the principles of scientific honesty and integrity. This document specifies the guidelines of good scientific practice at the AIP. It supplements the "Leibniz Code for Good Research Practice" by the Leibniz Association[1] and the Code of Conduct "Guidelines for Safeguarding Good Research Practice" by the German Research Foundation (DFG)[2].

In case of differences between these regulation and those of the DFG or the Leibniz Association, the latter regulations take precedence over these.

The members of the AIP serve astronomical and (astro)physical research. They promote the exchange of experiences among each other and with researchers worldwide. They are committed to advocate freedom, tolerance, truth and dignity in science and to be aware that those working in science have a special responsibility to humanity as a whole. In the spirit of these principles the members of the AIP commit themselves to obeying the following rules of ethics in their profession for securing a good scientific practice at the AIP.

§ 1 Scope

These guidelines set out the rules of good scientific practice at the AIP which must be followed by all institute members. Scientific misconduct is defined as serious violation of these rules in which further disciplinary measures can be required. Part B describes the procedures for dealing with allegations of scientific misconduct at the AIP.

§ 2 Rules of good scientific practice

(1) Principles

(a) Observing professional standard, i.e.: respect, politeness, tolerance, acceptance of mistakes and avoiding discrimination.

(b) Teaching and respecting ethical standards, as well as remaining up to date with these ethical standards.

(c) Ensuring adequate individual supervision of early career researchers and appropriate academic assessment.

[1] Version 18-Nov-2021:
https://www.leibniz-gemeinschaft.de/fileadmin/user_upload/Bilder_und_Downloads/%C3%9Cber_uns/Gute_wissenschaftliche_Praxis/Leibniz_Code_for_Good_Research_Practice.pdf

[2] Version 20-Apr-2022: https://doi.org/10.5281/zenodo.6472827

(d) Working responsibly with others and carrying out leadership tasks responsibly in working groups, preventing any kind of power abuse and empowering career/research freedom.

(e) Giving priority to originality and quality over quantity.

(f) Respecting the intellectual property of others in all publications, assessing ethical aspects, and properly complying with all rights and obligations arising from third parties.

(2) Practice

Carrying out science

(a) Fully documenting all steps, that are necessary for validation and reproducibility, and results of experiments or research studies – including negative results – and keeping protocols and research data securely, such that the provenance of the scientific data can be back-traced.

(b) Taking into account and acknowledging the current state of the research field, by familiarising with existing research.

(c) Using scientifically valid and appropriate methods. Scientific quality assurance is of particular importance when developing a new method or standard.

(d) Critically and systematically checking the validity and replicability of all results of experiments, analysis methods and other research designs.

(e) Research data, material, and software on which publically available results are based must be kept in an accessible form for at least ten years. Shortening this period has to be well justified and is only possible if in accordance with the regulations of the Leibniz Association and the German Research Foundation (DFG). AIP encourages making use of the various facilities, either provided by AIP or by external repositories, to store or publish data according to the FAIR principles (findable, accessible, interoperable, reusable).

(f) Maintaining neutrality and confidentiality when evaluating manuscripts, funding proposals or personal qualifications. Any conflicts of interest shall be disclosed, withdrawing from decision making bodies where appropriate.

Publications

(a) Plagiarism, fabrication of data or falsification of data is strictly forbidden. Documentation and results must not be manipulated and result selection to support a conclusion must be avoided. All published work must be accurately reported and be the exclusive work of listed authors or correctly acknowledged or cited.

(b) Publications should describe scientific findings and how they were reached in a comprehensive and reproducible manner.

(c) All data relevant to a publication must be clearly documented. Where possible and reasonable, making research data, materials, information, methods and software publicly available and citable is recommended.

(d) Previously published results may be included in later publications only if they are essential for understanding the context of the publication and if reference is made to the first publication.

(e) If researchers become aware of inconsistencies or errors in a published document, corrections should be issued. If the inconsistencies or errors are serious enough to require a correction, erratum or retraction, researchers will contact the publisher without delay.

Responsibilities

(a) AIP members take responsibility for putting the fundamental values and norms of research into practice and advocating for them.

(b) AIP members take responsibility, as an author of a scientific publication, for the content and presentation of the results and their discussion. All authors must agree on the final published version. Contributors not listed as authors should be appropriately acknowledged.

(c) Authorship is limited to persons who have made a significant contribution to the publication, such as to the design and development of the research study or experiments, to drawing up, analysing or interpreting the data, or writing the manuscript itself. 'Honorary authorships' are not admissible. Where appropriate, the authorship arrangements should form the subject of a collaboration agreement early on.

(d) The choice of journals, proceedings and conferences where scientific results are to be presented are the responsibility of the authors. Supervisors and heads are responsible for the control of the quality and review processes of these channels. The latter need to adhere to comparable scientific practices and code of conducts.

(e) Roles and responsibilities of the participants in a research project have to be clearly defined at each stage of the project.

(f) AIP members practice honesty in acknowledging the contributions of everyone involved and transparency in disclosing third-party funding providers at each step of the project.

Leibniz-Institut für
Astrophysik Potsdam

Good Scientific Practice at the AIP

Part B:
Procedures for Conflict Resolution and Handling Scientific Malpractice

§ 1 Ombudspersons

The AIP appoints two ombudspersons, responsible for settling conflicts of interest, answering questions concerning good scientific practice and overseeing cases of scientific malpractice when necessary. The AIP ensures that employees are aware of who the ombudspersons are. Their names and contact information are made available on the intranet and will be distributed to new employees upon joining the AIP on the process slip ("Laufzettel").

The two obudspersons are elected by employees of the AIP with a scientific master's degree or equivalent in a STEM subject (science, technology, engineering, mathematics). AIP employees holding a PhD in a STEM field who are not members of the institute management during their term of office are eligible. The ombudspersons are appointed for three years. Renewals of appointment are possible for up to three terms in total. Separate election rules specify the details and are approved by the Institute Management.

The ombuspersons carry out their duties honourably, responsibly, independently and free from directives. Ombudspersons maintain confidentiality in dealing with queries and, where possible, contribute to solution-oriented conflict mediation. Ombudspersons will notify the institute management of the AIP in the event of suspected cases of misconduct. The AIP gives the ombudspersons the support and acceptance they need to carry out their duties.

§ 2 Malpractice Procedure

(a) If scientific malpractice is suspected, an ombudsperson should be consulted. Ombudspersons will try to resolve the situation in accordance with the principles given above, are responsible for recording events, and will inform the institute management of the AIP if necessary.

(b) The complainants must have objective reasons to suspect an infringement. Knowingly or grossly negligently false or malicious accusations may themselves constitute misconduct.

(c) The allegations made by complainants must be documented.

(d) If the situation cannot be resolved by the ombudspersons or if any person concerned requests it, the case will be passed to the institute management. Charges and grounds must be recorded.

(e) If the scientific director(s) themselves are under suspicion of scientific malpractice, the chair of the scientific advisory board must be informed. She/he decide on the further procedures.

(f) The institute management or chair of the scientific advisory board, respectively, is asked to find out all relevant facts for the expressed charges. If necessary they include impartial employees of the AIP or external appraisers.

(g) The institute management or chair of the scientific advisory board, respectively, take appropriate measures to protect both the complainant and the respondent, adhering to strict confidentiality and a presumption of innocence.

(h) Neither the complainant nor the respondent should experience any disadvantage resulting from the investigation of the allegation until such time as research misconduct has been formally established.

(i) The person(s) who are suspected to have committed malpractice should have the opportunity to provide a statement within a period of 10 working days after the charge has been made and to judge the information that led to the charge. Therefore, he/she/they have to be able to assess all relevant documentation and to stay informed.

(j) The person(s) charged has to be provided with all possibilities to cite circumstances or facts or to provide material which is necessary for their exculpation, respecting the personal rights of the individuals involved.

(k) Based on the investigation and the statement of the person(s) concerned the institute management or the scientific advisory board, respectively, shall decide if scientific malpractice has to be regarded as proven.

(l) If the institute management or scientific advisory board can reach no conclusive opinion or is subject to or accused of prejudice or partiality towards any of the persons concerned, they relegate the investigation to the Central Ombuds Committee of the Leibniz Association. If the charge of scientific malpractice is proved positively, the institute management must, among others, decide consequences in accordance with employment law, civil law and criminal law. Should a branch director be affected, corresponding consequences will have to be decided by the AIP board of trustees in consultation with the scientific advisory board.

(m) If the charge of scientific malpractice is not proved positively, necessary steps must be taken to rehabilitate and repair any damage to the reputation of all persons concerned.

These regulations come into force by resolution of the Institute Management on 2023-01-23.

Prof. Dr. Matthias Steinmetz
Wissenschaftlicher Vorstand und Direktor Extragalaktische Astrophysik

Prof. Klaus G. Strassmeier
Direktor Kosmische Magnetfelder

Wolfram Rosenbach
Administrativer Vorstand und Direktor Administration