

Department of Mathematics and Computer Science

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Notat

Titel:

Open Science Policy at IMADA

This policy describes the implementation of the SDU Open Science Policy¹ at the Department of Mathematics and Computer Science (IMADA), thus outlining how research staff at the department will handle research data and publications in order to comply with the university policy.

This policy covers all research affiliated with IMADA. It does not cover administrative data, nor does it cover legal issues. It is assumed that all personal data is handled in compliance with GDPR as well as with SDU's own rules for handling personal data. In this policy, the term "researcher" refers to anyone carrying out research as a researcher affiliated to IMADA.

Open access to publications

PURE should be used to record all research publications. To support the goal of having open and free access to all publications, researchers are encouraged to obtain open access (OA) from the publisher whenever this is feasible². When this is not the case, researchers should, if possible, publish a copy of the manuscript, as close as possible to the final publication in a suitable open archive, also known as Green Open Access³. Researchers are also encouraged to store a Green OA pdf-version of their publications in PURE, for example by sending such a version to puresupport@bib.sdu.dk.

All researchers are encouraged to obtain a public ORCID id⁴ and to link it to their PURE profile at SDU⁵.

Open access to research data and storage

To ensure transparency and reproducibility of published research results that rely on research data⁶ such as data sets, codes, empirical analyses etc., and to ensure that research data are used to their full potential, researchers should, as far as possible, make their data and metadata available through the FAIR⁷ principles:

- Findable means that others can discover your data, so relevant metadata is assigned to data and indexed in a searchable source.
- Accessible means that your data can be made available to others directly by download or through contact with the author. Whenever possible at least the metadata should be open access.
- Interoperable means that your data can be integrated with other data. The use of standard or broadly used open format for (meta)data is encouraged.

¹ The SDU Open Science Policy is available via <u>https://www.sdu.dk/da/bibliotek/forskere/rdm+support/open+science+at+sdu</u>.

² SDU's library has entered into several memberships which provide discounts on Open Access publishing: <u>https://www.sdu.dk/en/for-skning/forskningspublicering/open+access/publiceringsaftaler</u>.

³ See Sherpa Romeo for publisher or journal policies and definitions of open access levels: <u>http://www.sherpa.ac.uk/romeo/index.php</u>.

⁴ See <u>https://orcid.org/</u>.

⁵ The easiest way is to register with ORCID through Pure, see <u>https://www.sdu.dk/da/forskning/forskningspublicering/orcid</u>. Researchers should be aware that duplicates may appear in ORCID; this might be resolved by contacting the PURE support team on <u>puresupport@bib.sdu.dk</u>.

⁶ For a definition of research data, see the SDU Open Science Policy on <u>https://www.sdu.dk/da/bibliotek/forskere/rdm+support</u>.

⁷ See <u>https://www.force11.org/group/fairgroup/fairprinciples</u> and <u>https://www.nature.com/articles/sdata201618</u>



• Re-usable means that your data can be used for new research. (Meta)data should be well-documented and released under a clear usage license, which is as open as possible (e.g. Creative Commons, MIT, GPL, etc.).

The department is committed to practicing and promoting data handling in a FAIR manner and therefore supports the *Sorbonne Declaration on Research Data Rights*⁸.

The department encourages researchers to use data management and storage solutions available at SDU, whenever possible. If this is not possible, external solutions such as Zenodo⁹ can be used instead. The data should be retained for a period of a minimum of 5 years after publication of the results, as stated in the Danish code of conduct for research integrity¹⁰. Personal data must be deleted, anonymized or archived in the Danish National Archives (Rigsarkivet) – if accepted – according to the current legislation¹¹. Whenever in doubt, researchers are encouraged to consult the SDU Research Data Management Support¹² for inquiries about the best solution for their needs.

Research assessment

Open Access publications will be evaluated as all other publications in decisions regarding hiring, tenure and promotion, as recommended by the San Fransisco Declaration on Research Assessment (DORA)¹³. The department strives to be explicit about the criteria used to reach decisions in such contexts. These criteria should adhere to the guidelines set out by the Faculty of Science¹⁴.

Data management plan

When commencing a research project, it is necessary to plan for collecting, processing, analysing, storing, preserving/disposing of and disseminating the research data that is used in the project. Researchers are required to make a data management plan (DMP) for some type of research projects, such as: projects involving personal data; projects where the verification or reproducibility of the results rely on collected or produced data sets; projects involving external partners or collaborators who require a DMP; and externally funded projects where a DMP is a requirement from the funding agencies. Responsible for writing and updating the DMP should be either the principal investigator (PI) of the project or the appointed data contact person from within the project (who could also be the PI). If in doubt about the necessity of a DMP, the research staff are encouraged to consult the SDU RDM Support. For a project requiring a DMP, this should be developed before the project begins and updated whenever necessary throughout the project. Should a DMP be required by funding agencies or external collaboration partners, a DMP template might be provided. A number of standard templates for DMP are available online¹⁵.

When a researcher leaves the department

The following rules should be implemented when a researcher who is responsible for data leaves the department:

 If the leaving researcher is responsible for data related to a project that continues at the department, then the responsibility for the data must be transferred to another researcher at the department after obtaining the necessary permissions (e.g., from the Danish Data Protection Agency or SDU RIO).

⁸ See <u>https://www.leru.org/files/Sorbonne-declaration.pdf</u>.

⁹ Recommended by EU in Horizon2020.

¹⁰ See <u>https://ufm.dk/publikationer/2014/the-danish-code-of-conduct-for-research-integrity</u>.

¹¹ See <u>https://www.sa.dk/da/forskning-rigsarkivet/anmeldelse-aflevering-forskningsdata/</u>.

¹² See <u>https://www.sdu.dk/da/bibliotek/forskere/rdm+support</u>

¹³ See <u>https://sfdora.org/read</u>.

¹⁴ See <u>https://www.sdu.dk/en/om_sdu/fakulteterne/naturvidenskab/ledelse_administration/regelsamling.</u>

¹⁵ Several tools are available to generate DMPs from templates, such as DMP Online (Danish installation): <u>https://dmponline.deic.dk/</u>.



 If the leaving researcher is responsible for data related to a project that is discontinued, the (meta)data should either be stored in an online repository (if they do not contain personal or otherwise confidential information), or they should be offered to the Danish National Archives for archiving (if they contain personal or otherwise confidential information). If the Danish National Archives does not accept the data, then the researcher is required to delete or anonymize them immediately.

Responsibilities

The department will ensure that the policy is revised every second year at minimum, the next time being early 2023 or after the SDU Open Science Policy is revised. This is the responsibility of the HoD.

Each Head of Section at IMADA is responsible for ensuring the knowledge of the policy among the section members.

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