Subject: Specific instructions about the content, length and schedule for our special issue, Workflow for Applied Data Analysis, for Philosophical Transactions of the Royal Society
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(The following is the official email from Philosophical Transactions A.)

Dear Authors,

We are delighted to inform you that our Theme Issue has been approved for publication in *Philosophical Transactions A*. We look forward to working with you on this project.

In due course you will receive an email from the journal's Editorial Office with details of how to submit your paper and instructions about formatting it to the journal's requirements. However, we wanted to take this opportunity to give you some specific instructions for this issue.

Content
The full proposal including everyone's proposed article is attached. For convenience, the summary is below. When writing your article, please keep this general perspective in mind.

> *The topics of this issue will cover workflow—that is, the steps of building statistical models and connecting them to scientific theories, validating statistical methods, communication of results, scientific criticism, and other aspects of research that are central to building trust in the scientific process. This topic has become increasingly important in an era when open data are reshaping how we approach science at the same time that replication crises across fields are redefining the public's perception of science. The individual articles will address different conceptual and computational aspects of workflow in scientific and statistical modeling, including a range of areas of application in the social and biomedical sciences.*
>
> *Textbook presentations of the scientific method focus on theories, models, and formal statistical inference. In the past decade or so, things have changed. The replication crisis in science has revealed major problems with the system of peer review, publication, and publicity of science. New methods in machine learning have made it possible to make progress in many areas of science and engineering using minimal substantive theory. The intention of our proposed theme issue is to bring all this together to provide a cohesive overview of the value of statistical data analysis workflow and how it can adapt to changes in science, in a way that is not possible through individual disparate articles. A themed issue will allow both overviews and opinions of data analysis workflow today, and provide new research with examples in the topic, to help researchers adopt these methods. The issue will include: reviews of recent developments in scientific and statistical workflow; new research on the application of modern workflow in biomedicine, economics, and other areas of natural and social science; discussions how to make these methods more widely available to researchers; and ideas on integrating developments of workflow in science and statistics, connecting ideas of measurement and replication to methods for building trust when integrating diverse sources of data.*
>
> *We envision this theme issue of the journal as benefiting the academic areas of statistics and machine learning—including their applications across mathematics, physics, engineering and biology—by bringing a focus to ideas of workflow that have typically appeared in different places and in particular application areas without a clear overarching framework. This is important not just because of the new theoretical perspectives and worked examples presented in the articles in the journal but also because some of the papers particularly address questions of communication of workflow ideas to researchers who otherwise would not be aware of these ideas and methods. This issue will have special impact from its eclectic set of methodological, theoretical, and applied articles. Within statistics and machine*

learning, the impact of the theoretical and methodological ideas (in particular in the first four and last two articles in the collection) will be enhanced through explorations of these ideas in computation and in a wide range of real applications in the physical, biological, and social sciences. From the other direction, the presence of articles by leaders in several different applied areas will raise the profile of the issue within these different fields. In this issue, we are ambitiously aiming for an impact across science, not just within statistics and computing.

Length
The journal does not enforce a strict length limit, however papers that are overly long will need to be reduced. As a guide, please aim for no more than 13 printed pages. As a rough guide, one journal page is enough space for 650 words or two average figures (including references).

Style
LaTeX and MS Word templates for preparing your manuscript will be provided by the Editorial Office in due course. Please also refer to the instructions for authors at http://rsta.royalsocietypublishing.org/content/information-authors.

Open Access
Philosophical Transactions A is a hybrid journal, meaning that authors can either choose to publish their work in the standard way for free (i.e., behind a paywall), or pay a charge to publish their work open access.

After 2 years, all papers will become free to read automatically, however open access publication allows your article to be made freely available via the Royal Society website as soon as it is published. Authors who belong to an institution signed up to one of our Read & Publish agreements, can publish their work open access at no personal cost to them.

Preprints
The Royal Society has a generous preprint policy, whereby a preprint of your paper may be deposited to a recognised repository (such as arXiv) at any time during the peer review process. Similarly, the accepted author manuscript (AAM) may be deposited once the paper has been formally accepted.

Diversity
The Royal Society is committed to increasing diversity in science and supporting scientists from all backgrounds, geographic regions, and career stages. As lead authors, please be proactive in promoting diversity and provide opportunities for marginalised individuals and early career researchers where possible.

Schedule
As all papers in a particular issue publish together, publication can be significantly delayed by the last paper to be submitted. We want our issue to be timely and for papers to be published as quickly as possible, so prompt submission and quick turn-around of revisions will be appreciated.

Here is the planned schedule. Please let us know if you are concerned about being able to meet any of these dates.

1 Apr 2025: Submission deadline.
The papers will then go through a review process.

If you have any questions about preparing or submitting your manuscript, please feel free to get in touch with the journal's Editorial Office at philtransa@royalsociety.org. Thank you again for contributing to this issue and we look forward to working with you.

Yours,
Andrew, Aki, Richard, and Lizzie

Attachments:

Workflow_Theme_proposal_revised.pdf 217 KB