The Alan Turing Institute

THEORY & METHODS CHALLENGE FORTNIGHTS

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Call for Theory & Methods Challenge Fortnights

We seek research proposals from across the Turing research community and beyond for the 'Theory & Methods Challenge Fortnights in data science and artificial intelligence event series' (abbreviated as TMCF). There will be two TMCF events awarded, each involving 8 to 14 days of focused research. They can be held across the Turing University Network or at the Institute's offices in the British Library, London.

TMCF brings together experts from The Alan Turing Institute and other institutions worldwide to join forces for a multi-day research event on a specific theoretical or methodological challenge. These challenges can be drawn from any discipline in the data science and artificial intelligence ecosystem. We expect the theoretical and methodological contributions stemming from the challenge to impact or have the potential to impact data science, artificial intelligence or at least one of the associated disciplines in a fundamental way.

The successful proposals will receive sufficient funding to fully cover travel, subsistence, and accommodation (and reasonable caring responsibility costs, as necessary) for the challenge team for a maximum of 2 weeks.

Application Process

Researchers are invited to contribute proposals presenting one modern theoretical and/or methodological challenge and a plan to tackle it. To maximise the chances of success (see Evaluation Process), applicants are recommended to formulate proposals that meet the following criteria:

1. The results are of broad theoretical and methodological importance (a justification and the appropriate supporting literature should be referenced within the proposal) in at least one discipline in the data science and artificial intelligence ecosystems.
2. The proposal identifies potential collaborators from the Turing network and selected external experts (**at most 6**, including the lead proposer(s) upon application).
3. The challenge should benefit from cross-disciplinary group work, potentially combining methodological expertise across data science and artificial intelligence.
4. The results should have evident importance in application areas and can be developed further to deliver impact in applied streams of work at the Institute (e.g., linking with the Data Study Groups, Interest Groups, through applications for follow-up funding, etc.) or elsewhere.

Applications can be submitted via the Institute's Flexi-Grant portal. The access link is available on the application page of the website.

Eligibility

Turing affiliates (including Turing Fellows, Turing Research Fellows, Turing employed researchers, and researchers from the Turing University Network (TUN)) are invited to contribute proposals.

Researchers not formally affiliated with the Institute can also submit proposals as long as they have a Turing affiliate (from the above categories) as a Co-I and register with Turing's Flexi-Grant portal.

Because of the time commitment involved in proposing and organising a TMCF, PhD students must obtain explicit permission from their PhD supervisor(s) for their proposal to be considered in the application process and include a Turing affiliate as a Co-I.

Evaluation process

Proposed challenges will be collated and shared publicly with the Turing research community, who will vote for up to two challenges that should be tackled. Voters can also indicate interest in participating in the challenge teams.

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The lead applicants of the two successful challenges should confirm the location and event dates (see Key dates below). They also have the responsibility to set up a challenge team of **up to 12 individuals**, including themselves and the other internal and external experts they identified in the proposal (see point 2 in the application process above), complemented by others who expressed interest during the voting stage. The lead applicant must also justify their six or more additional team members. The team can include only one PhD student.

The event should last between 8 and 14 days and can be either continuous or split into two smaller sub-events, all taking place within a calendar month.

At the end of or shortly after each TMCF, the challenge teams will present their findings at an open event. This will also be an opportunity for a broader discussion of the next steps and follow-on projects.

Software

If teams plan to produce open-source software as part of their TMCF activity, they should consider including a member of Turing's Research Engineering Group (REG) or corresponding teams at a university in the network as part of their application.

Caring responsibility costs

To ensure participation from a broad section of our research community, a contribution to caring costs will be provided upon application.

Equality and Diversity

The Alan Turing Institute is committed to creating an environment where diversity is valued, and everyone is treated fairly. In accordance with the Equality Act, we welcome applications from anyone who meets the specific criteria of the post regardless of age, disability, ethnicity, gender reassignment, marital or civil partnership status, pregnancy and maternity, religion or belief, sex, and sexual orientation.

We are committed to building a diverse community and we therefore welcome applications from the broadest spectrum of backgrounds. Please refer to the Institute's equality, diversity and inclusion principles when considering the membership of the challenge teams.

Key dates

Call for proposals opens	on	18 September 2023
Proposal submission deadline	on	22 January 2024
Turing research community receives the list of challenges	on	1 February 2024
Voting period starts	on	1 February 2024

Voting period ends	on	15 February 2024
Announcement of successful challenges	on	26 February 2024
Lead applicants confirm challenge teams, event location and dates	by	March 2024
Theory & Methods Challenge Fortnights event	by	December 2024