ADASS XXXIV

ASTRONOMICAL DATA ANALYSIS SOFTWARE & SYSTEMS XXXIV

L-Università ta' Malta

📅 10–14 November 2024   📍 University of Malta, Valletta Campus, Malta   ✈ um.edu.mt/events/adass2024

Contents

Presenter Instructions

1. **Submission Deadline**: All presentations should be submitted one week before the event to ensure a smooth setup. The submission deadline is Sunday 3rd November 2024.

2. **Presentation Format**: We recommend PowerPoint presentations since the primary computer in the Aula Magna will be running Windows. PDF presentation will also be accepted.

3. **Backup**: We advise presenters to bring a backup of their presentation on a USB stick for any last-minute changes or unforeseen technical issues.

4. **Use of Personal Laptops**: While presenters may use their laptops, we highly encourage submitting the presentation beforehand to avoid delays. Please note that compatibility issues between their laptops and our setup may arise, leading to further delays.

5. **Screen Aspect Ratio**: The screen aspect ratio will be 16:9 with resolution 1920 by 1080p. Please ensure presentations are designed accordingly.

6. **Video and Sound**: Videos with sound are supported. Please ensure any embedded videos in the presentation file work properly to avoid technical issues.

7. **Screen Sharing**: Presenters wishing to demonstrate software live may either pre-record the demo and show it as an embedded video, or join the active Zoom session and share their screen.

Remote Presenter Instructions

1. **Delivery Mode**: Remote presenters should join the Zoom channel for their session prior to their allocate time slot. For their talk, they can share their screen and present their talk live. Zoom channel IDs will be published in due course.

2. **Pre-Recorded Talk**: In case of technical issues (from both sides) we suggest that remote presenters prepare a pre-recorded talk and submit this to us by the 3rd of November 2024.

Poster Instructions

ADASS 2024 will feature electronic posters instead of physical ones. These posters will be showcased on electronic displays located in the same area as the coffee breaks and demo sessions. Each display will present a selection of approximately 10 to 12 posters. The displays will be numbered and will include a list of the posters they are showing. Additionally, all posters will be available online, indicating which displays they are featured on, and may be accompanied by a pre-recorded lighting talk if the author chooses to provide one.

1. **Submission Deadline**: All presentations should be submitted one week before the event to ensure a smooth setup. The submission deadline is Sunday 3rd November 2024. The poster and optionally the lightning talk must be uploaded to Pretalx.

2. **Poster Dimension**: The electronic displays will be 9:16 with a resolution of 1080 by 1920p (like a standard HD TV set up in portrait mode).

3. **Poster Format**: The poster needs to be uploaded in JPEG and PDF formats. The JPEG will be used for the electronic display, whilst the online poster will be hosted as PDF.

4. **Lightning Talk**: A pre-recorded short lightning talk may be uploaded together with the poster.

5. **Proceedings**: Poster authors are encouraged to submit up to four pages for the proceedings (see Author instructions below).

6. **Slack**: A slack channel will be created to encourage discussions about individual posters.

7. **Agenda**: The agenda for ADASS 2024 does not include sessions for poster presentations.

Proceedings Instructions

Adapted from ADASS XXXII

If you contribute to ADASS 2025, you are expected to submit a paper for the proceedings. Invited speakers are required to submit a paper and everyone else is strongly encouraged to do so. ADASS Proceedings are published by the Astronomical Society of the Pacific (ASP) as an open-access part of their **Conference Series**.

Deadline

The deadline for the final publishable version is **15th December 2024**.

Copyright Form

ASP will not publish your paper without a completed copyright form. Please take care to fill in the copyright form completely. (Microsoft Word version). The completed form can be signed with an image of your signature or by printing, signing, and scanning back to PDF. Please do so at your earliest to avoid chaser emails in the future.

ADASS XXXIV Editor

- Andrea DeMarco, University of Malta (contact: andrea.demarco@um.edu.mt)
- Jackson Said, University of Malta

Proceedings Contributions Page Limits

Software and data science change rapidly and continually. Contributions to the literature of astronomical software data systems generally fall into a few categories, such as project status updates, user documentation, decadal white papers, and so forth. ADASS proceedings fill a unique role in providing the opportunity for an instantaneous snapshot. (One might imagine compiling ADASS papers of a project like IRAF from successive proceedings and rifling through them like an animated flipbook.) Contributions to the ADASS proceedings may provide links to key contemporaneous partners or to online resources, whether permanent or ephemeral, and a typical ADASS contribution will touch on the high points of current work, not generally on an exhaustive review of a project's entire history. The page limits are a trade-off between accommodating as many projects as possible and providing a few pages to summarize your key work while remaining within a single volume each year.

- Invited Talks: 10 pages
- Contributed Talks: 4 pages
- Poster Papers: 4 pages
- BoFs: 4 pages
- Focus Demos: 4 pages
- Tutorials: 4 pages

Paper IDs

Each paper has been assigned an ID in the format **XNnn**, where **X** is one of:
- **I** for Invited talk (including the Prize talk)
- **C** for Contributed talk
- **P** for Poster (plus three digits)
- **B** for BoF
- **F** for Focus demo
- **T** for Tutorial

and **Nnn** is a three-digit number. The first digit represents the topical theme, and the others are a one-indexed running number in order of submission for posters or presentation for talks.

1. Proposal and Observation Preparation Tools
2. The rise of AI for science and data center operations
3. Extending the life of software and data
4. User experience
5. Data management and trusted repository in the Open Data era
6. Roadblocks in Astronomical Data Analysis
7. Metadata, semantics and data models applicable to data formats
8. Real-time and near real-time processing pipelines

For example, the first submitted poster ID in the "User Experience" theme is **P401**.

Instructions for paper preparation

We have provided the ADASS2024.tar proceedings package archive with style files, check scripts, and documentation to help you prepare papers for submission. Among the list of files, you will find:
- *ASP Instructions for Authors and Editors* (manual2010.pdf)
- *Guidelines for preparing an ADASS paper* (ManuscriptInstructions.pdf)

Please follow the guidelines carefully because the manuscript must be delivered to ASP in print quality. The more issues are solved early on in the process, the more time we all save

Downloading manuscript preparation materials

The first step in preparing your paper is to download the **ADASS2024.zip** file. Then unzip this into a convenient parent directory to create the ADASS2023_author_template subdirectory (folder). If you author two papers, create a separate ADASS2023_author_template directory for each paper. **Do not submit multiple proceedings in the same directory.**

Authors will receive an email soon for downloading materials and uploading their manuscripts.

Using Overleaf?

Editing your paper in Overleaf is also known to work: simply upload the .tex template, the two asp2014 files, and optionally your BIB file and EPS figures to your Overleaf project (don't start from scratch, or your file will be likely named main.tex, which is what you don't want!) The easiest way is to run make overleaf, which will produce a single ZIP file with the required content, which you can upload to Overleaf in one go.

Check your manuscript

Your paper should typeset without generating any LaTeX errors or warnings. Overfull hbox warnings, in particular, need to be fixed. The make check command runs a python script that looks for a number of common problems that have been found in submitted papers. You should run it on your paper before packaging it up for submission and should fix any problems it finds. This test is a copy of a basic paper checking program that will be run by the ADASS editors on all submitted papers. It is also possible to run the check manually with the PaperCheck.py script. See ManuscriptInstructions.pdf for detailed instructions on how to check your manuscript.

Package and submit your paper

Your Paper ID (PID) is listed on your abstract listed on the meeting **agenda**.

You should create a .tar.gz file with a name based on the identifier for your paper, e.g., <PID>.tar.gz. This should contain:
- The <PID>.tex LaTeX file
- The <PID>.bib file defining any cited references
- And <PID_*.eps graphics files used by the paper
- The makedefs file
- The resulting <PID>.pdf file for the paper, so we can see how you got it.
- A signed copyright form with a filename copyrightform_<PID>_<AuthorName>.pdf.

Makefile commands

If everything in the ADASS2024_author_template directory is set correctly, you should be able to run the following make commands:
- make pdf   # Build the PDF file (possibly twice to get rid of some errors
- make check   # Check the manuscript for issues
- make tar   # Build the tar file for submission
- make overleaf # Prepare a ZIP file to bootstrap your overleaf project

Please note that in order to get all the make commands working correctly, you should be working in the ADASS2023_author_template folder.

Upload your proceedings contribution

If your <PID>.tar.gz is smaller than the 10 MB limit, please upload your file to Pretalx under your login. Otherwise, please email <PID>.tar.gz to adass2024@um.edu.mt. And if that doesn't work email the same address and we'll make alternate arrangements.

Tutorial Instructions

The first step when thinking about User Experience: Set-up an UX Vision

For this tutorial, we will be using Miro Boards, so it's essential to have a computer with a stable internet connection and a Miro account. If you don't have one yet, creating a Miro account is free and only takes a few minutes. All the presentation materials and exercise slides will be accessible directly through the Miro board at {https://miro.com/app/board/uXjVNNlE8Ok=/}. Throughout the session, we'll be working on three different templates, where participants can add sticky notes and use the Miro wireframe library to visualize and create the necessary artifacts. The collaborative features of Miro will allow us to brainstorm and develop ideas together in real time.

Exercise 1: Group formation instructions
Each group should consist of 4 or more members + Team name. If there are extra participants, some groups may have more members, and some roles can be shared. The roles are: User, Designer, Product Owner and Project Member. Introduce yourselves and have coffee!

Exercise 2: Create Persona and User Story Map instructions

Persona
Creating personas and setting clear goals are essential steps in user-centred design, helping to ensure that the product or service meets the needs of its intended users.

A persona is a fictional, yet realistic, representation of your target user. It's based on research, such as interviews, surveys, or user data, and encapsulates the characteristics, behaviours, motivations, and pain points of a specific user group

User Story Map
It maps out user activities, tasks, and goals in a structured format, helping teams to see the big picture while prioritizing work for development. We will provide an example + template and further instruction during the presentation.

Exercise 3: Create User Journey Map
A powerful visual tool that outlines the complete experience a user has when interacting with a product, service, or brand. It captures every touchpoint, emotion, and action a user takes, helping teams understand pain points, motivations, and opportunities for improvement. Also for this exercise we will provide examples and templates to create the user journey map."

Programming the GPU on your laptop – is it easy, is it useful?

This tutorial is aimed at ADASS attendees who may have sat through numerous talks about how GPUs make everything faster, wondered about making use of their GPUs to speed up compute tasks, and then somehow never found the time to try it. The aim is to give people who have no experience with GPU programming a kick-start towards trying it for themselves on their own laptops. The tutorial will be based around a small set of example C++ command line programs that perform calculations on 2D data, all of which run on MacOS, Linux and Windows. Attendees will be able to build, run, modify, and experiment with these programs, seeing how the GPU performance compares with the CPU. These instructions describe how to download and build these example programs.

You can download the full tutorial instructions for MacOS and Linux here.
You can download the full tutorial instructions for Windows here.

Processing and analyzing XMM-Newton data with ESA Datalabs: A collaborative approach

Coming soon

The Advanced Scientific Data Format (ASDF)

Coming soon