# Gaia Archive Quickstart

This document provides some information and links to get you started on working with the ESA Gaia Archive. The tutorials in the Gaia hands-on session at the Sagan Workshop 2022 are based on using the ESA archive.

### Register as archive user

If you plan on regularly requesting data from the Gaia archive it is a good idea to register as an archive user. The registration is easy and quick (and free) and offers the following facilities:

- 20 GB of space to store query results
- the option to create and share your own tables ('user tables'),
- longer timeout for large or complex query jobs.

You can register here: <u>https://www.cosmos.esa.int/web/gaia-users/register</u>

#### Links to archive help pages and tutorials

**Optional.** If you want to prepare before the workshop, you can browse through the below pages to familiarise yourself with the Gaia archive.

- ESA Gaia archive: <u>https://gea.esac.esa.int/archive/</u>
- Entry page for help on using the archive and Gaia data documentation: <u>https://www.cosmos.esa.int/web/gaia-users/archive</u>
- Graphical user interface: <u>https://www.cosmos.esa.int/web/gaia-users/archive/help</u>
- Demos and tutorials (see menu on left): <u>https://www.cosmos.esa.int/web/gaia-users/archive/help</u>
- Cross-matching catalogues. *This will be exercised during the workshop.* https://www.cosmos.esa.int/web/gaia-users/archive/combine-with-other-data
- Access to multidimensional data (spectra, mcmc samples, light curves). *This will be exercised during the workshop.* <u>https://www.cosmos.esa.int/web/gaia-users/archive/datalink-products</u>

## Gaia DR3 information

The following links provide access to information on the various aspects of Gaia DR3.

• Overview pages: <u>https://www.cosmos.esa.int/web/gaia/data-release-3</u>

- Links to papers documenting the release contents: <u>https://www.cosmos.esa.int/web/gaia/dr3-papers</u>
- Auxiliary data: <a href="https://www.cosmos.esa.int/web/gaia/dr3-auxiliary-data">https://www.cosmos.esa.int/web/gaia/dr3-auxiliary-data</a> Some of this data is not available in the archive.
  - Note the Gaia DR3 extinction law (<u>https://www.cosmos.esa.int/web/gaia/edr3-extinction-law</u>)
  - and the exoplanet candidates list (<u>https://www.cosmos.esa.int/web/gaia/exoplanets</u>).

#### Executive summary and archive tables cheat sheet

You can find a very compact summary of the Gaia DR3 contents <u>here</u>. It contains an overview of the contents, a summary of all the papers describing the release, some useful links, and a table linking a certain data type you might be interested in to the Gaia DR3 archive table where you can find that data.