

# The Amateur Virtual Observatory

## Exercise 1: The Aladin Web Site and creating your first image

**Prerequisites:** Computer with Internet connection.

- 1) Click on the following link to access the Aladin home page on the web <http://aladin.u-strasbg.fr/aladin.gml> . You might find it useful to bookmark this page as we will be returning to it frequently.
- 2) On this page take a moment to read the *Description* to understand a bit more about what Aladin can do and it's history. If you wish have a look at the examples in the *Image Gallery* to see what can be achieved. The other thing worth a check is to see what the latest version of Aladin is – it should be listed on this page.
- 3) There are three modes for running Aladin at the top of the screen. As an introduction on what Aladin can do click on the link to the *Aladin Previewer* . This is a very simple interface that allows you to have a preview of the facilities.
- 4) A web page should open with a box for you to enter details of the object you want to view.
- 5) Enter the object you want an image of ( from outside the Solar System), try M1 to start and also click on the *Color* box to get a three colour image. Then click the *go* button to send your request to Aladin. You should get an image returned together with some information on what images sources were used to derive the three colours of the image.
- 6) Also try M13, M31, Eta Carina and Betelgeuse. Note how only the centre of M31 is shown as it is larger than the default field size, this also applies to the area around Eta Carina. Also Betelgeuse is so bright so the image has all sorts of artefacts.
- 7) Try some other objects – note that Aladin (or in fact Simbad) which converts the object you have entered in the box to Right Ascension and Declination is not very good on named objects.
- 8) Finally try NGC 6946. Save a copy of the image to your hard disc by right clicking on the image and using 'save image as' to save it to your hard disc. Suggest you start a folder called NGC6946 as we will be visiting this Galaxy again later.
- 9) Note that you can save other images of the same area from column on the left in either FITS format or as a JPEG.
- 10) Finally click on the Galaxy Name NGC 6946 this will exit Aladin and take you to a Simbad page showing information about this Galaxy. Scan down the page and have a look at the information. We will come back to the Simbad information pages in a later exercise.

11) Note: that if you started in Simbad there is a link under Plots and Images to see the image of the Galaxy in the Aladin Pre-viewer where we started.

You have now generated your first images using Aladin. The pre-view interface does not allow you any control over the image with the exception of being able to switch between monochrome and colour.