Milky-Way analog aggregate model calculation

In this notebook we make use Galaxy Builder classifications, alongside the custom code developed for aggregation of models, to calculate and vizualise aggregate models for the Milky-Way analogue subject set.

```
Defining magic commands ✨
```

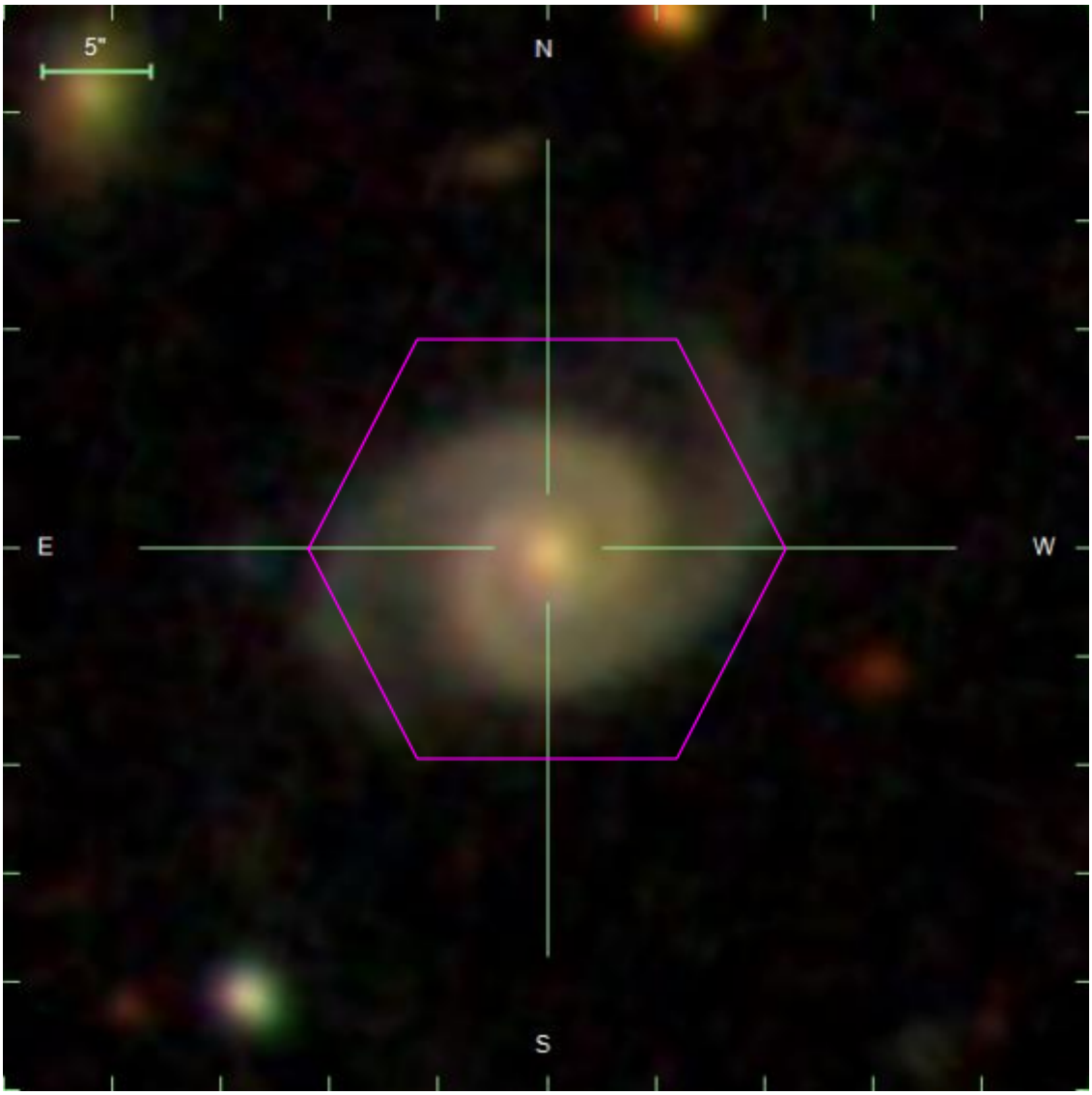
```
Importing needed modules...
```

Define which subject to work on

Papermill - Parametrized

```
[3]  subject_id = 30055897
```

The MaNGA RGB-composite for this galaxy looks like:



We'll need some metadata to properly plot results

[5]
```
gal, angle = gu.get_galaxy_and_angle(subject_id)
pic_array = gu.get_image(subject_id)
psf = gu.get_psf(subject_id)
diff_data = gu.get_diff_data(subject_id)
pixel_mask = 1 - np.array(diff_data['mask'])[::-1]
galaxy_data = np.array(diff_data['imageData'])[::-1]
size_diff = diff_data['width'] / diff_data['imageWidth']
```

Make use of the `gzbuilderaggregation` to calculate aggregate models (which uses `gzbuilderspirals` to obtain logarithmic spiral fits)

[6]
```
agg_model, masks, arms = gzbuilderaggregation.make_model(
```

```
        gu.classifications.query('subject_ids ==
    {}'.format(subject_id)),
        gal, angle
    )
```

What does the aggregate model look like?