**Star == 0**

This criterion cuts out all point sources (and objects with observed colors indicating they are stars at near redshift), ensuring we exclude all stars that were measured alongside the galaxies/clusters of interest in GOGREEN’s observations.

**K\_flag == 0**

This criterion excludes galaxies that were flagged by SExtractor, the tool used to detect sources and measure their brightness. The K flag indicates there is a problem with the data that invalidates the measurement.

**totmask == 0**

This criterion checks whether a galaxy is located at a position in which an aggressive mask was used (Balogh et al. 2020) and excludes it if so. This is done because a mask indicates the imaging for this position is incomplete (not achieved in all filters).

**re > 0**

Galaxies without a valid effective radius measurement are not useful to us for the purpose of this project. This criterion specifies that there must be effective radius data and it must be valid (nonzero, nonnegative). A way of restricting sources for which Galfit returned a nonphysical result.

**Fit\_flag > 1**

Indicates Galfit ran to completion and judges that its result was usable (though it may not be).

**n < 6**

This criterion ensures no galaxies with Sérsic indices beyond that which we measure for (n > 6) are included. A way of identifying sources for which Galfit returned a nonphysical result.

**HSTFOV\_flag == 1**

Indicates there is HST data for the galaxy.

**1 < zspec < 1.5 (or in the absence of a high-quality zspec (check quality flags. need to be quality 3 or 4 – not 1 or 2), (1 < zphot < 1.5)) <- check Balogh 2021 to find out what flags are used.**

This criterion ensures we only include galaxies that have at least one redshift that falls within the range of the survey. This is not so important for member galaxies since membership is determined by closeness of redshift to the cluster redshift (all of which fallen within the range). However, this criterion is vital for plotting field galaxies since the GOGREEN dataset includes all galaxies in the portion of the sky it covered, regardless of redshift.