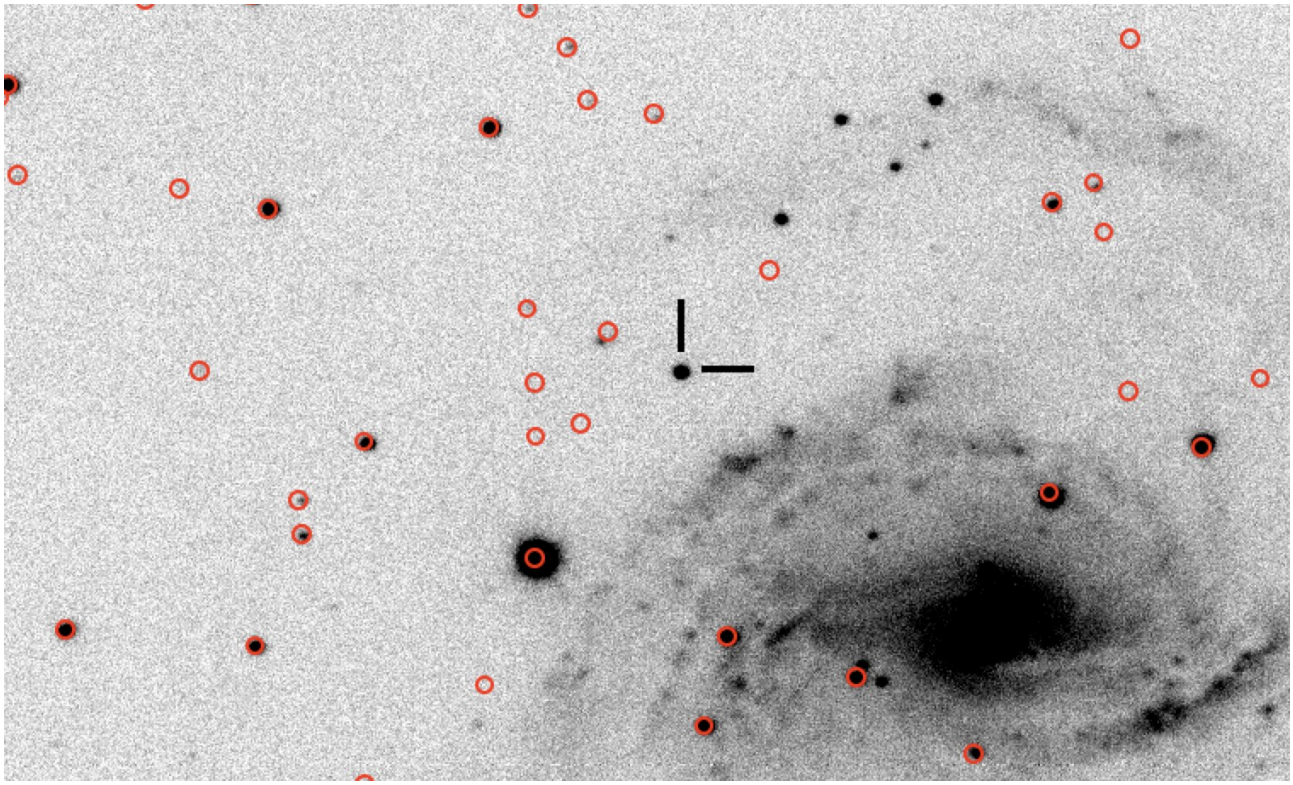
AutoPhOT – Four year PhD project in the School of Physics, University College Dublin



Every night, survey telescopes find hundreds or even thousands of astronomical transients. These events range from supernova explosions at the end of a stars life, through stars being torn apart by black holes, and even kilonovae resulting from the collision of neutron stars.

Once found, astronomers use telescopes around the globe to follow up these events, obtaining images and spectra to understand the physics behind these transients.

As part of the Automated PHotometry Of Transients (AutoPhOT) project, you will develop a photometric pipeline to rapidly and automatically perform analysis of imaging data for transients. This pipeline will be able to handle homogenize imaging data from different telescopes, and will ultimately allow for techniques such as image subtraction, PSF fitting photometry to be applied in an automated and intelligent fashion.

The project is suited for a physics graduate with strong coding skills, and an interest in astronomy.

Funding is available for four years (fees and stipend), and will start in October 2018. To apply, please send your CV and cover letter to morgan.fraser@ucd.ie, and arrange for two academic references to be sent to the same address. The deadline for applications is Friday April 27th 2018. For further details, please contact Dr. Morgan Fraser.