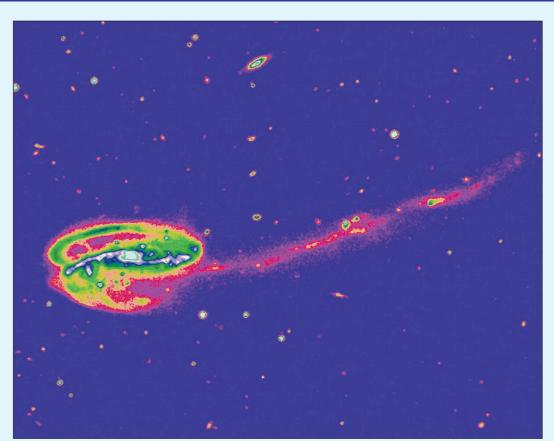


## THE ISAAC NEWTON GROUP OF TELESCOPES

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From observations carried out as part of the ING Wide-Field Survey astronomers have been able to identify one place where a dark galaxy may exist. They noticed that a galaxy called UGC 10214, shown above, has a stream of material flowing out of it, as if it is interacting with another galaxy. In this case, the stream of material is apparently flowing towards nothing. Picture credit: Neil Trentham and Simon Hodgkin (IoA). Colour composition by Nik Szymanek.

## Message from the Director

Dear Reader,

With this fourth issue of the ING Newsletter we kick off this —still junior— communication channel for the observatory into the new Millennium.

Since the previous issue, NAOMI has seen its first part of the technical commissioning programme and passed most tests very well. Although there remains much work to fully test and characterise this complex system, NAOMI was shown to be capable of delivering diffraction limited images. Unfortunately poor weather hampered the first science observations that were scheduled in December and January. This in spite of the current La Palma winter being one of the best for astronomy in recorded history of the observatory! However, there will be opportunities for service observations later this semester, when the weather is less likely to play its tricks. If you're interested in using NAOMI for your science programme: watch the schedule on our web pages!

The commissioning of NAOMI is the first important step in ING's adaptive optics programme. The following phases are now well under way with the development of a coronagraph (called OSCA) at UCL, and the kick-off of the project in collaboration with the Observatoire de Lyon to convert the OASIS integral field spectrograph to work with NAOMI.

Also on the second main development strand for the WHT, that of wide field spectroscopy, very good progress has been made. The construction of the new fibre unit that will feed the WYFFOS spectrograph from the prime focus is well advanced and on track for commissioning this summer. The new unit will improve throughput of the fibres and enhance S/N as the smaller diameter fibres will receive much less sky contamination.

Data rates from telescopes are generally on the rise. This is certainly also the case for the ING telescopes. Large volumes of data require new techniques to extract the scientifically relevant information in the most effective way. In this respect the ING Wide Field Survey that has been running on the INT for