

An Introduction to ground based astronomical instrumentation
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With this lecture, we introduce some of the basic concepts relating to the design and realisation of instruments for optical and infrared astronomy using ground based telescopes. At a large modern observatory such as the European Southern Observatory Very Large Telescope, the astronomer has access to a wide range of imagers and spectrometers and so may select the instrument best suited to their scientific programme.

Some of the novel techniques for optimising the scientific output of astronomical instruments will be presented. Examples of multi-object spectrometers and integral field spectrometers will be presented and these techniques explained. Future prospects for ground based instrumentation will be discussed.