



# TAIPAN

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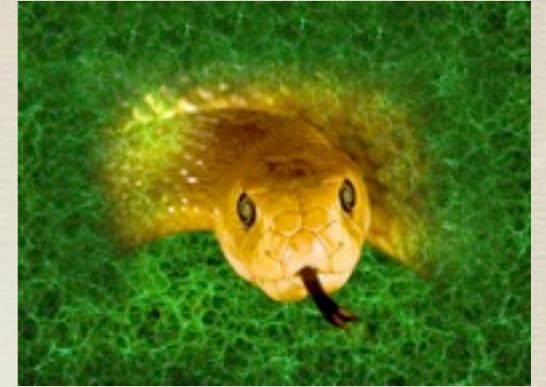
Department of Industry, Innovation,  
Climate Change, Science, Research  
and Tertiary Education











# TAIPAN

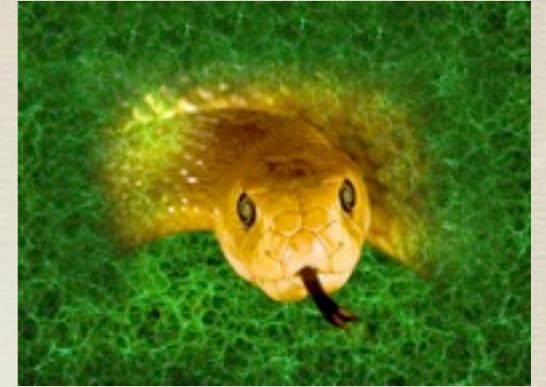






-  Transforming Astronomical Imaging-surveys through Polychromatic Analysis of Nebulae
-  Survey with the UK Schmidt Telescope at Siding Spring, following in the footsteps of the 6dF Galaxy Survey (Jones et al., 2004, 2009)
-  All southern sky multi-object spectroscopic survey, ~500000 galaxies
-  30 authors on the original expression of interest to the AAO, but planning to have more people involved





# Nomenclature

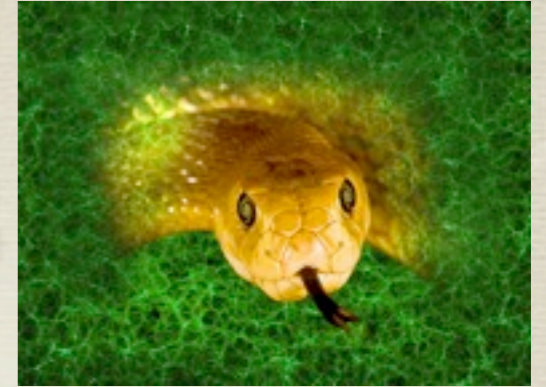





-  TAIPAN: The galaxy survey, the spectrograph, the whole instrument, the project, potential confusion with FunnelWeb
-  The galaxy survey: “The TAIPAN survey” or “the TAIPAN galaxy survey”
-  The stellar survey: “The FunnelWeb survey”
-  The instrument: “The UKST starbugs positioner” or “MANIFEST prototype”, plus “the TAIPAN spectrograph”





# Hardware status

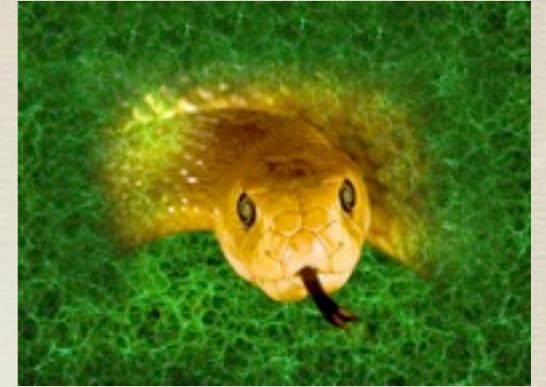






-  Starbugs positioner well underway.
-  TAIPAN spectrograph: subject of a LIEF proposal submitted early this year, supported by 12 institutions (out of 16 nationally with active astronomy research groups).
-  The UKST refurbishment: subject of capital funding bid to Department of Innovation, outcome of which is contingent on success of the LIEF proposal.





# Scientific goals

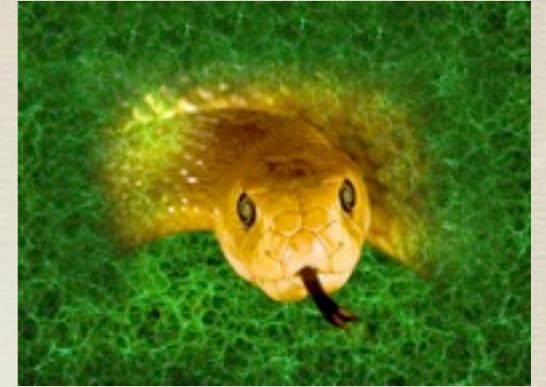





-  Three themes: Cosmology, Galaxies, Stars
-  The “Stars” theme is addressed by FunnelWeb, and will be discussed in detail at the workshop tomorrow at UNSW.
-  The “Cosmology and Galaxies” themes are addressed by the TAIPAN galaxy survey.
-  The key science goal for the TAIPAN galaxy survey is the 1% precision  $H_0$  measurement. This was identified from the MQAAAstro TAIPAN workshop last December as the primary stand-alone scientific outcome from the survey.





# This workshop



-  Discuss target selection requirements for different science goals of the TAIPAN galaxy survey.
-  There is potentially some tension between optimising the galaxy target selection to achieve the cosmology goals and the galaxy evolution goals.
-  Come to agreement on the optimum target selection that achieves the key scientific goals, while maximising the scientific return for additional science.