The Spanish Dancer Puts on a Show:
The 2018 Outburst of NGC 1566

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TESS Science Conference 2019
Objective:
Combining ground-based and space observatories to study AGN variability
Illustrations: NASA/CXC/M.Weiss

- X-ray corona
- Accretion disk
- X-ray outburst
NGC 2617

Shappee et al. 2014
An outburst within NGC 1566 was detected in 2018.

Hubble Space Telescope
An outburst within NGC 1566 was detected in 2018.
Long term variability observed by ASAS-SN

Increase in brightness due to supernova

Much larger brightness increase from AGN outburst
NGC 1566 Multi-wavelength Light Curves
Measured Time Lags

NGC1566

Wavelength Passband

X-ray, UV, u, b, g, TESS

Measured Lag from TESS (days)
Future ASAS-SN+TESS AGN Patrol

NGC 5548

R.A. = 14:17:59.51 Dec = 25:08:12.45