Testing high-contrast coronagraphs under ExAO conditions at Palomar

Gene Serabyn, Eric Bloemhof, Bertrand Mennesson, Kent Wallace, Mitch Troy
JPL
&
Pierre Haguenauer
ESO

Relies on a 1.5 m “well-corrected subaperture”

The Binary Star HD148112 through a FQPM

Normal “off-FQPM” image

“Through–FQPM” image

Cross-diagonal subtraction

Peak extinction = 80
Mean of 5 short exposures (total time = 21.24s)

Peak extinction = 235
≈ 6 mag