PIAA / binary mask hybrid coronagraph experiment
Enhancing contrast by improving wavefront stability and control in air

Goal: demonstrating highest contrast possible

Description of latest developments of the experiment

Interesting result: ultimate contrast should be possible without going into vacuum

Image of the gaussian PSF after preliminary wavefront control

Outline

Global state of the experiment

Insulation and temperature control

Preliminary wavefront control

Automatic centering of PSF on focal plane mask

First results of speckle nulling algorithms

Stability study, extrapolation of ultimate contrast reachable