

High contrast imaging techniques to characterize exoplanets

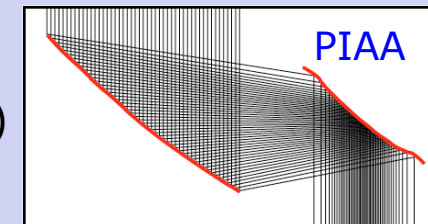
- **Direct imaging of exoplanets**

- Direct detection and spectral characterization of faint planets close to the star
- High sensitivity, high spectral resolution, high spatial resolution, high contrast

- **High contrast imaging (Adaptive Optic, Coronagraphy)**
+ Pupil remapping techniques

- Phase Induced Amplitude Apodization, **PIAA** (Guyon 2003)

Continuous redistribution of the light in the telescope pupil



- "Dense Aperture Mapping" or **DAM** (Patru 2011)

Discrete redistribution of the light => Digitize the pupil by using interferometry & spatial filtering

