



# Single Conjugated Adaptive Optics Upgrade for LBT

## Proposal for commissioning science

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Observational period 1-6 November, 2020

Submission deadline October 8, 2020

Title	
Abstract	

PI name	
PI institute	
PI email	
Co-I list	



## 1 Scientific justification (max 1 page including figures)



## 2 Observational strategy (brief description max 250 words )

*e.g. Are PSF stars required? If PSF stars are required when will they be observed relative to the science target. Will the AO loop be closing on the target or an off-axis guide source. If the latter what is the required performance on the target (anisoplanatism).*

## 3 Target(s)

	Target #1	Target#2	Target#3
RA [hh:mm:ss]			
DEC [dd:mm:ss]			
Point like /extended (resolved)			
Total Open shutter time [min]			



#### 4 AO reference (for each target)

AO REFERENCE	Target #1	Target#2	Target#3
RA [hh:mm:ss]			
DEC [dd:mm:ss]			
Mag (Vega R and I preferred)			
Spectral type or color  (if available)			
Type (stellar or extended)			
If extended, specify object type and size [asec]	e. g. Multiple star separated 0.4asec		
Angular separation from the target [asec]			



## 5 Minimal AO performance required (Strehl ratio OR Contrast OR FWHM)

Here should be reported the minimal performance required to achieve the science goal identified in the proposal justification. Please use the [SOUL SR-calculator<sup>1</sup>](#) in order to check if the performance are achievable with the selected AO reference. See section 3 of [SOUL-T06<sup>2</sup>](#) (Performance DOC) for the full set of tools.

		Target #1	Target#2	Target#3
PSF FWHM	Full Width Half Maximum [mas]			
	Wavelength [nm]			
Strehl ratio	SR			
	Wavelength			
PSF contrast	Contrast (wing/peak)			
	Distance form peak [mas]			
	Wavelength [nm]			

## 6 Previous PI/Co-I experience using AO systems for observations

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<sup>1</sup> <http://adopt.arcetri.astro.it/strehl.html>

<sup>2</sup> [http://soul.arcetri.astro.it/wp-content/uploads/2020/09/SOUL-T06\\_SOUL-LUCI1\\_performance\\_V1.0\\_20200918.pdf](http://soul.arcetri.astro.it/wp-content/uploads/2020/09/SOUL-T06_SOUL-LUCI1_performance_V1.0_20200918.pdf)