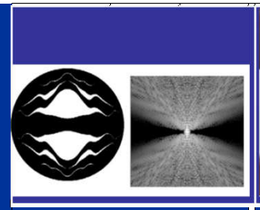
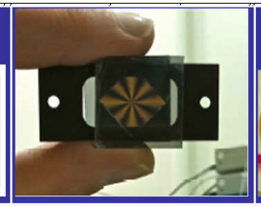
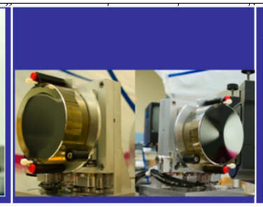
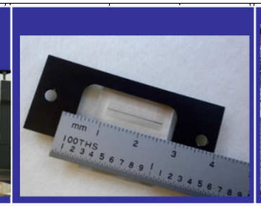
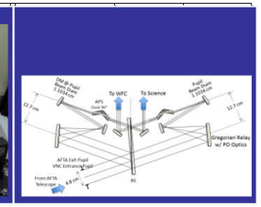
AFTA Coronagraph Selection Contex Chart

Description							
	Concept Name	Shaped Pupil Mask	Vector Vortex	Phase Induced Amplitude Apodization	Hybrid/Band Limited Lyot	Visible Nulling Coronagraph -- DaVinci	Visible Nulling Coronagraph -- Phase Occulted
	Nick Name	Shaped Pupil	VV	PIAA	Hybrid Lyot	DaVinci-VNC	PO-VNC
	Advocate	Jeremy Kasdin	Gene Serabyn	Olivier Guyon	John Trauger	Mike Shao	Rick Lyon
	Common features	LOWFS, IFS	LOWFS, IFS	LOWFS, IFS	LOWFS, IFS	LOWFS, IFS	LOWFS, IFS
	Unique features	Amplitude mask at pupil, 2 DMs	Phase mask at pupil, 2 DMs	Pair of apodization mirrors, 2 DMs	Focal plane occulter with both amplitude and phase profiles, 2 DMs	Pupil-division, double stage nuller, segmented DMs, fiber budle filter	Proprietary achromatic phase shifter; single stage nuller, segmented DMs, fiber budle filter
TFOM -- PROPER simulation, AFTA obscured pupil	Center wavelength						
	Bandwidth						
	Raw contrast						
	IWA						
	OWA						
	Hole shape						
	Field						
	Throughput						
TFOM -- TDEM lab demonstration, non-obscured pupil	Center wavelength						
	Bandwidth						
	Raw contrast						
	IWA						
	OWA						
	Hole shape						
	Field						
	Throughput						
Sensitivity to WFE jitter/drift -- Simulation	Z2,Z3						
	Z4						
	Z5						
	Z6						
	Z7						
	Z8						
	Z9						
	Z10						
Engineering	Font-end optics						
	Coronagraphic optics						
	FSM						
	DM						
	Color filters						
	LOWFS optics						
	IFS Optics						
	Mechanism DOFs (not including DMs)						
	Total # of unique mechanisms						
Key component TRL assessment	Lyot mask						
	PIAA mirror						
	PIAA focal plane mask						
	Shaped pupil mask						
	VV input apodizer						
	VV mask						
	DM						
	Fiber bundle w/ lenslet array						
		Likelihood (H,M,L) / Consequence (H,M,L)	Likelihood (H,M,L) / Consequence (H,M,L)	Likelihood (H,M,L) / Consequence (H,M,L)	Likelihood (H,M,L) / Consequence (H,M,L)	Likelihood (H,M,L) / Consequence (H,M,L)	Likelihood (H,M,L) / Consequence (H,M,L)
Remaining Risks							

Notes

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