Time to achieve Science Objectives — CE40+CE20+A$^\sharp$ | CE40+2A$^\sharp$ | A$^\sharp$ (HLA)

Category	Science Objective	Time
BHs and NSs Throughout Cosmic Time	Detect 500 BNS mergers for $z > 5$	Unachievable
	Detect 500 BBH mergers for $z > 10$ ($\delta m_1/m_1 < 20\%$)	Unachievable
MMA and Dynamics of Dense Matter	Locate 100 BNS mergers within $\Delta\Omega_{90} < 1\deg^2$	
	Constrain Nuclear Equation of State (NS radius < 10 m)	50 years
	Mapping 500 GRBs to progenitors ($z > 2$; $\Delta\Omega < 100\deg^2$)	Unachievable
	Detect 10 BNS mergers 300s before merger ($\Delta\Omega_{90} < 10\deg^2$)	>100
New Probes of Extreme Astrophysics	Detect source with postmerger SNR > 5	40 years
	Detect 50 millisecond pulsars	
Fundamental Physics and Precision Measurement of H_0	Measure H_0 to within 0.2%	3600 years
	Detect 10 BBH mergers with SNR > 1000	1000 years
Early Universe	Measure Stochastic Background for $\omega_{gw} < 1.3e{-}11$	240 years

Time [Years] — 1 10 20 ... 10 ... 20