

Table 1: Present and future electromagnetic facilities able to observe faint/distant counterparts to gravitational waves. Detection limits for UV, optical, and near-IR facilities are expressed in AB magnitudes. Distances out of which those facilities can detect GW170817-like events are indicated. Detection limits are computed for  $\sim 1$ hr exposure time.

	<b>Facility</b>	<b>Det. limit</b>	<b>D (Mpc)</b>	<b>Status</b>
Gamma-rays	<i>Fermi</i>	S/N 5	80	Present
	AMEGO	S/N 5	130	Future
	e-ASTROGAM	?	130	Future
X-rays	<i>Swift</i>	S/N 5	$\sim 80$	Present
	<i>Chandra</i>	$3 \times 10^{-15}$ erg s $^{-1}$ cm $^2$	150	Present
	ATHENA	$3 \times 10^{-16}$ erg s $^{-1}$ cm $^2$	480	Future
	<i>Lynx</i>	$6 \times 10^{-16}$ erg s $^{-1}$ cm $^2$	450	Future
	STROBE-X	S/N 5	120	Future
	TAP	?	?	Future
Ultraviolet	HST (im)	26 mag	2000	Present
	HST (spec)	23 mag	400	Present
	LUVOIR			Future
Optical Imaging	Subaru	27 mag	3200	Present
	LSST	27 mag	3200	Future
Optical Spectroscopy	Keck/VLT	23 mag	500	Present
	GMT	25 mag	1265	Future
	TMT	25.5 mag	1592	Future
	E-ELT	26 mag	2005	Future
Infrared Imaging	WFIRST	27.5 mag	4800	Future
	Euclid	25.2 mag	1700	Future
Infrared Spectroscopy	Keck/VLT	21.5 mag	481	Present
	GMT	23.5 mag	762	Future
	TMT	24 mag	960	Future
	E-ELT	24.5 mag	1208	Future
Radio	VLA (S)	23 $\mu$ Jy	91	Present
	ATCA (CX)	42 $\mu$ Jy	51	Present
	ngVLA (S)	1.5 $\mu$ Jy	353	Future
	SKA-mid (L)	0.72 $\mu$ Jy	634	Future