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## Observational prospects in the electromagnetic domain of the gravitational wave sources

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A new exciting frontier of observational astronomy will soon start to be explored: the current upgrade of gravitational wave ground-based detectors, LIGO and Virgo, should make possible to observe gravitational wave signals for the first time. Expected sources of gravitational waves include the most energetic astrophysical events such as the merger of neutron stars and/or black holes and the core collapse of massive stars. These events are believed to produce the electromagnetic transients, like the gamma-ray bursts and supernovae. The simultaneous use of electromagnetic facilities and gravitational-wave detectors will give the unique opportunity to catch the electromagnetic signature of the gravitational wave source and to observe the same source with different messengers (GW and photons). Challenges, opportunities and strategies to develop and carry on rapid follow-up electromagnetic observations of gravitational wave candidate events will be outlined.

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