

# Searching for Strange Quark Matter Objects through Gravitational Waves

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It is hypothesised that the true ground state of hadronic matter is strange quark matter. Therefore, strange objects like strange stars, strange dwarfs, and even strange planets may stably exist. However, differentiating strange stars from ordinary neutron stars is very challenging. In this report, I will discuss the aspect of observing strange objects through gravitational waves. By the special properties of strange planets and strange dwarfs, gravitational waves from systems containing these objects may provide unique clues to the existence of strange objects, thus proving the strange quark matter hypothesis.

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