

## Mergers of strange quark stars

We analyze GW190425 and GW170817 within a scenario in which strange quark stars (QSs) coexist with neutron stars. We will conclude that:

- GW190425 could be a QS-QS merger, producing a supramassive QS;
- a QS-QS merger produces a weak KN signal (which could have passed undetected in the case of GW190425);
- the material ejected in the post-merger is mostly flowing in the equatorial plane, leaving an empty cone around the rotation axis;
- it is therefore not impossible that a FRB was produced and detected in association with GW190425;
- if GW190425 produced a supramassive QS, GW170817 most likely produced a totally stable QS. A large fraction of its rotational energy could have been released by emission of GWs because QSs can develop large non-axisymmetric instabilities even in the presence of a small degree of differential rotation. In this way the main objection against the formation of a stable remnant can be addressed.

Obviously, in both cases ET could clarify immediately the fate of the merger by observing the ring-down signal.

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