## PHAROS Conference 2020: The multi-messenger physics and astrophysics of neutron stars



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## Finite temperature equation of state with exotic degrees of freedom

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The properties of slowly rotating proto-neutron stars and merger remnants are studied using finite-temperature equation of state models derived from the covariant density functional theory. In addition to the whole baryonic octet we account for Delta-isobars, as particle degrees of freedom. Wide ranges of entropy per baryon, lepton fraction and baryonic mass are considered. We investigate the I-Love-Q universality at finite temperature by confronting the predictions of hyperonic equation of states with those of their counterparts which additionally allow for Deltas.

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