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The Cosmic Quarks

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There are at least three sources of cosmic quarks in the universe. One, the quark nuggets which may survive beyond a certain baryon number during the phase transition from quarks to hadrons microseconds after the big bang. These quark nuggets can very well be candidate of cold dark matter and these nuggets consist of strange quarks.
Second, the interior of the neutron star may well be made of quarks due to very very high pressure. It is further shown that the interior of heavy neutron star, recently discovered ≈ 2M⊠, with an appropriate equation of state, can also be made of quark core.
Finally, using the property of colour entanglement among quarks it is entirely possible to have free orphan quarks roaming around in the cosmos. Some better understanding of dark energy and dark matter is possible with these entangled orphan quarks.

Content type

Theory

Collaboration

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