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Radial oscillations of quark stars admixed with dark matter

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We discuss compact stars consisting of cold quark matter and fermionic dark matter treated as two admixed fluids. After the computation of the stellar structure and fundamental radial oscillation frequencies for different masses of the dark fermion in the cases of weak and strong self-interacting dark matter, we show that the fundamental frequency can be dramatically modified and, in some cases, stable dark strange planets and dark strangelets with very low masses and radii can be formed. We also discuss effects from a strong magnetic field.

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