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Anisotropic stars made of exotic matter in light of the complexity factor formalism

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Within Einstein's General Relativity we study exotic stars made of dark energy assuming an extended Chaplygin gas equation-of-state. Taking into account the presence of anisotropies, we employ the formalism based on the complexity factor to solve the structure equations numerically, obtaining thus interior solutions describing hydrostatic equilibrium. Making use of well-established criteria we demonstrate that the solutions are well behaved and realistic. A comparison with another, more conventional approach, is made as well.

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