This talk will be based on a recent set of papers in which we showed that replacing classical geodesics with quantal (Bohmian) trajectories induces a couple of quantum correction terms to the Raychaudhuri and Friedmann equations. The first of these terms gives rise to an infinite age of our Universe. The second term produces a quantum potential and density of a Bose-Einstein condensate (BEC), which can be interpreted as observed dark energy and dark matter in our Universe respectively. We show that the critical temperature of a BEC composed for light gravitons and axions far exceeds the temperature of our Universe at all epochs, suggesting that the condensate formed in the very early universe.

References: