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Some exact solutions exhibiting inflation and dark energy CHRIS VUILLE, Embry-Riddle Aeronautical University — Einstein's equations are solved for the case of a plane-symmetric massless scalar field and cosmological constant. Among the resulting solutions are those that exhibit both rapid inflation at the beginning of the universe and protracted exponential expansion at all times thereafter. This suggests the possibility of a single physical mechanism responsible for both rapid inflation in the early universe and the accelerated expansion thereafter due to dark energy.

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