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Lens map in Horndeski theory of Gravity

Horndeski Gravity is the most general 2nd order scalar-tensor theory in 4 dimensions. This theory contains well known
modified Gravity Theories such as k-essence, f(R) and Galileon Gravity.
In this work we aim to derive the lens map and related quantities such as the time delay in the framework of Horndeski gravity in general spacetimes, and more specifically in the case of a point lens in a FLRW spacetime. This generalizes previous results obtained in Modified Gravity Theories, providing a formalism for the study of Weak and Strong
Gravitational Lensing in general scalar-tensor theories, and a probe to test Dark Energy and Modified Gravity theories using
graviational lensing observables."

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