

SHORT TALK

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"Canonical quantization of the Szekeres spacetime"

We present the effect of the quantum corrections on the Szekeres spacetime, a system important for the study of the anisotropies of the pre-inflationary era of the universe.

The study is performed in the context of canonical quantisation in the presence of symmetries. We construct an effective classical Lagrangian and impose the quantum version of its classical integrals of motion on the wave function.

The interpretational scheme of the quantum solution is that of Bohmian mechanics, in which one can avoid the unitarity problem of quantum cosmology.

We discuss our results in this context.