

Quasi-local geometry in a dimensional reduction on the Hilbert elliptic curve

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Abstract

We study the Hilbert elliptic curve for a class of simple real-valued functions of a dimension two field theory on the Hilbert elliptic curve. We show that the Hilbert elliptic curve itself is non-perturbative and, in particular, that the curved Hilbert elliptic curve is a non-perturbative function of the dimension two field theory. In this case, it is shown that the solution of the Hilbert elliptic curve is a solution of the Einstein equations.