

A Mini-Review on Mini-Black Holes from the Mini-Big Bang

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We review the main ideas behind the predictions of mini black holes for the LHC. These ideas come into discussion about 15 years ago together with the idea of a reduced Planck scale, known as TeV gravity. A main ingredient of these Models, namely the ADD model and the RS model was the idea of additional space-like dimensions which would lead to a dissolution of the gravitational interactions at large distance, but allowing for strong gravitational interactions at small distances. The main outcome, among others less prominent one, was the prediction of black hole production at LHC, the famous 'LHC as a black hole factory' prediction.

We present these ideas now in the light of the recent results from ATLAS and CMS and will conclude that the current data situation puts tight constraints on these exciting Quantum Gravity phenomena.

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