The 8th Conference of the Polish Society on Relativity



Contribution ID : 54

Type : not specified

Quantum chaos of the Belinski-Khalatnikov-Lifshitz scenario

Thursday, 22 September 2022 14:00 (20)

We quantize the solution to the Belinski-Khalatnikov-Lifshitz scenario using the affine coherent states quantization method. Quantization smears the gravitational singularity avoiding its localization in the configuration space. Classical chaotic behavior of the BKL scenario becomes enhanced at the quantum level. Our results strongly suggest that the generic singularity of general relativity can be avoided at quantum level.

Presenter(s): PIECHOCKI, Włodzimierz (NCBJ)