Tensions with cosmological singularities: Should we try to avoid their appearance?

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The appearance of an initial (and sometimes also a final) cosmological singularity in practically all realistic models of the evolution of the universe is distinguishing feature of the modern cosmology. Tensions concerning this question are always present. There are attempts to construct cosmological models where the geometry is always regular. However, some approaches based on the description of the possible passage through the singularities were also developed recently. We have tried to elaborate a general formalism, telling when it is possible and when the singularity present unsurmountable obstacle.

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