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## Cosmological Isotropization from Symmetry Point of View

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Bianchi models can be used to address the isotropization problem during the cosmological expansion of a homogeneous universe at an earlier epoch of its evolution. As there is a large family of such models, therefore it is necessary to characterize them on the basis of their geometrical and dynamical properties which we accomplish using Noether point symmetries of the geodetic Lagrangian in these spacetimes. The existence of such symmetries not only helps us to specify a model but also provide us first integrals which can be used to comprehend the dynamics significantly. We then investigate the positive energy condition in all specified models which provides us critical bounds on the physical parameters. Lastly, the possibilities of involving physical fields (perfect fluid, dust or vacuum) for a consistent viable cosmological model and its evolution at different stages, is discussed.

### Summary

**Primary author:** ALI, Sajid

**Presenter:** ALI, Sajid

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