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## **Bianchi type-I cosmological dynamics in $f(Q)$ gravity: a covariant approach**

*Thursday, 5 October 2023 17:00 (20 minutes)*

Making use of the  $1 + 3$  covariant formalism, we show explicitly the effect that nonmetricity has on the dynamics of the universe. Then, using the Dynamical System Approach, we analyze the evolution of Bianchi type-I cosmologies within the framework of  $f(Q)$  gravity. We consider several models of function  $f(Q)$ , each of them manifesting isotropic eras of the universe, whether transitional or not. In one case, in addition to the qualitative analysis provided by the dynamical system method, we also obtain analytical solutions in terms of the average length scale  $l$ .

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