SEMINARIO SEMANAL "Dr. Jesús Reyes Corona"

"Towards a new method to compute the Hubble constant"

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Evento presencial



Resumen

In this talk, we discuss a new independent general relativistic approach to obtaining the late-time Hubble constant in terms of observable quantities. To this end, we take into account massive geodesic particles circularly orbiting the Kerr-de Sitter black holes that emit redshifted photons towards a distant observer whose going away from the emitter-black hole system. Then, with the help of some physically motivated approximations, we extract the Hubble law from the frequency shift of these photons that are observable quantities. Finally, we present some exact formulas for the Schwarzschild black hole mass and the Hubble constant in terms of the observational redshift of massive bodies circularly orbiting this black hole.

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