Spanish and Portuguese Relativity Meeting



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Generalized Siklos space-times

Tuesday 23 July 2024 16:30 (15 minutes)

Siklos space-times conform an interesting class of exact solutions of General Relativity. In particular, they represent idealized gravitational waves propagating on top of anti-de Sitter space-times. In this talk, I will present a generalization of them, which are naturally called generalized Siklos space-times. I will motivate their introduction, elaborate on the curvature of these space-times and discuss some relevant physical features of them. Among other aspects, I will show that these space-times lead, in certain cases, to a superposition principle for the Einstein equations. Based on Lett.Math.Phys. 113 (2023) 5, 106 with C. S. Shahbazi and work in progress with Bernardo Araneda.

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