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Title: Dependence of the Gauss–Codazzi equations and the Ricci equation of Lorentz surfaces

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The fundamental equations of Gauss, Codazzi and Ricci provide the conditions for local isometric embeddability. In general, the three fundamental equations are independent for surfaces in Riemannian 4-manifolds. In contrast, we prove in this article that for arbitrary Lorentz surfaces in Lorentzian Kaehler surfaces the equation of Ricci is a consequence of the equations of Gauss and Codazzi.

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