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Codimension one partially umbilic singularities of hypersurfaces of \mathbb{R}^4

This talk is about the mutually orthogonal one dimensional singular foliations, in oriented three dimensional manifolds \mathbb{M}^3 , whose leaves are the integral curves of the principal curvature direction fields associated to immersions $\alpha : \mathbb{M}^3 \rightarrow \mathbb{R}^4$. We focus on behavior of these foliations around singularities defined by the points, called partially umbilic, where at least two principal curvature coincide. It will be described the generic behavior of the foliations in the neighborhood of partially umbilic points of codimension one. These are the singularities which appear generically in one parameter families of hypersurfaces. We express the codimension one condition by minimally weakening the genericity condition given by R. Garcia, D. Lopes e J. Sotomayor in *Partially Umbilic Singularities of Hypersurfaces of \mathbb{R}^4* . *Bulletin des Sciences Mathematiques (Paris. 1885)*, v. 139, p. 431-472, (2015).