



Seminário Doutoral

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A Splitting Theorem for Euclidean Submanifolds of Nonpositive Sectional Curvature

ABSTRACT: In this talk we will consider an isometric immersion $f : M^n \rightarrow \mathbb{R}^{n+p}$ with flat normal bundle and nonpositive sectional curvature. By exploring certain restrictions on the space of relative nullity, $\Delta(x) = \{X \in T_x M : \alpha(X, Y) = 0 \quad \forall Y \in T_x M\}$, where α denotes the second fundamental form, we will present a theorem that allows us to locally split the isometric immersion into a product of immersions of the form $g_j : M_j^{n_j} \rightarrow \mathbb{R}^{n_j+p_j}$. The strategy will be to use the local de Rham splitting theorem.

This seminar inserts itself in the PhD program of the speaker.

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Hora: 16 Horas

Sala: 6.2.33