



## 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  $\alpha$  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.

**Dia: 23 de Janeiro de 2019**

**Hora: 16 Horas**

**Sala: 6.2.33**