

# Hipersuperfícies de Rotação em $\mathbb{S}^n \times \mathbb{R}$ e $\mathbb{H}^n \times \mathbb{R}$

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Neste trabalho, estudamos hipersuperfícies de rotação nos espaços produto  $\mathbb{S}^n \times \mathbb{R}$  e  $\mathbb{H}^n \times \mathbb{R}$ . Apresentamos parametrizações explícitas para tais hipersuperfícies, que por sua vez são utilizadas para o cálculo das curvaturas principais. Apresentamos também um critério para verificar quando uma hipersuperfície nos espaços  $\mathbb{S}^n \times \mathbb{R}$  e  $\mathbb{H}^n \times \mathbb{R}$  é uma hipersuperfície de rotação. Como aplicações, classificamos dentre as hipersuperfícies de rotação, as hipersuperfícies mínimas, as intrinsecamente planas, as hipersuperfícies em  $\mathbb{S}^n \times \mathbb{R}$  normalmente planas no espaço Euclidiano  $\mathbb{E}^{n+2}$  e as hipersuperfícies em  $\mathbb{H}^n \times \mathbb{R}$  normalmente planas no espaço Lorentziano  $\mathbb{L}^{n+2}$ .

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