Universidade Federal de Campina Grande
Centro de Ciências e Tecnologia
1 Escola de Inverno em Geometria DIferencial

Título: "Submanifolds immersed in a warped product with density "

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Resumo: We study n-dimensional complete submanifolds immersed in a weighted warped product of the type $I \times_f M^{n+p}_\varphi$, whose warping function f has convex logarithm and weight function φ does not depend on the real parameter $t \in I$. Assuming the constancy of an appropriate support function involving the φ-mean curvature vector field of such a submanifold Σ^n jointly with suitable constraints on the Bakry-Émery-Ricci tensor of Σ^n, we prove that it must be contained in a slice of the ambient space. As applications, we obtain codimension reductions and Bernstein-type results for complete φ-minimal bounded multi graphs constructed over the n-dimensional Gaussian space. Our approach is based on the weak Omori-Yau's generalized maximum principle and Liouville-type results for the drift Laplacian.

Data: 10 de Setembro de 2020 (Quinta Feira)
Link: meet.google.com/hhu-jmpm-dtx
Data: 10:00

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