



# Universidade Federal de Campina Grande

## Centro de Ciências e Tecnologia

### 1ª Escola de Inverno em Geometria Diferencial



**Título:** “Two-sided hypersurfaces, entire Killing graphs and the mean curvature equation in warped products with density.”

**Palestrante:** André Felipe Araujo Ramalho

**Resumo:** Our purpose is to obtain uniqueness results related to the mean curvature equation for entire Killing graphs constructed over the base  $\mathbb{P}^n$  of a warped product of the type  $\mathbb{P}_f^n \times_{\rho} \mathbb{R}$  with warping function  $\rho$  and density  $f$ . For this, we establish a suitable  $f$ -parabolicity criterion and, under appropriate constraints on the Bakry-Émery-Ricci tensor and on the  $f$ -mean curvature, we prove some rigidity results concerning two-sided hypersurfaces immersed in  $\mathbb{P}_f^n \times_{\rho} \mathbb{R}$ .

**Data:** 23 de Julho de 2020 (Quinta Feira)

**Link:** [meet.google.com/zyx-doud-fnf](https://meet.google.com/zyx-doud-fnf)

**Data:** 10:00