Palestrante: Willian Isao Tokura
Instituição: Universidade Federal da Grande Dourados
Título: Nonexistence results for warped product gradient Einstein-type manifolds.

Resumo: In this note, we study gradient Einstein-type manifolds that belong to the class of warped product manifolds. We establish a necessary and sufficient condition to construct such manifolds. This crucial result leads to an elliptic nonlinear differential equation that the warping function must satisfy. Using this, we prove gradient estimates for the warping function of gradient Einstein-type manifolds drawing upon the work of Li-Yau and Souplet-Zhang. As an application, we provide theorems that deal with the non-existence and triviality of these manifolds.