

Colloquium

November 29, 4:05 p.m. (9th Period) (in the Atrium)

Speaker: Hayden Hunter

Title:On Higher Dimensional Milnor Frames

Abstract

A classic result of Milnor shows that any 3 -dimensional unimodular metric Lie algebra admits an orthonormal frame with at most three non-zero structure constants. We refer to these frames as Milnor frames. We define extensions of Milnor frames into higher dimensions. We determine that the higher dimensional analogue of Milnor's result can only hold on the 3-dimensional Heisenberg Lie algebra directly summed with an abelian Lie algebra.