

Mathematics Colloquium

What's the Deal with Solitons?: An Investigation of Ambient Obstruction Solitons

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11:10 am – 12 p.m.
Building 180, Room 107

Abstract

After introducing the major objects of differential geometry, we will embark on a discussion about the broad idea of solitons, what they are, and what role they play in differential geometry. Adding structure to these ideas will enable us to establish a number of results for q -solitons where q is some general tensor with prescribed properties. Moving on, we will apply these results to ambient obstruction solitons and, more specifically, Bach solitons.

About the speaker: Dr. Erin Griffin is currently an Assistant Professor at Seattle Pacific University. In 2021, she received her Ph.D. from Syracuse University where she worked with Prof. Will Wylie. She is also a proud Cal Poly class of 2016 alumna. Her work is in the field of Riemannian geometry and focuses on studying geometric flows, their solitons, and the relation of both to conformal geometry.