Peter Petersen, 57th Texas Topology and Geometry Conference

Texas Tech University, Feb. 17-19, 2017

Title:
The Alekseevsky Conjecture

Abstract:

It has been a long standing goal to understand which homogeneous spaces admit Einstein metrics. In the cases where the Einstein constant is nonnegative this has been understood for quite a while. In the negative case much less progress has been made. Alekseevsky conjectured upwards of 45 years ago what such spaces should look like. The talk will explain all of this and also what progress has been made on this conjecture in recent years.