

Fatness

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Abstract

30 years ago Weinstein introduced the concept of a fat fiber bundle, which is a Riemannian submersion with totally geodesic fibers such that all vertical sectional curvatures (i.e. of 2-planes spanned by a horizontal and vertical vector) are positive. The purpose of my talk is to summarize consequences of fatness, discuss known examples and interesting open problems in this subject. In the second part we discuss the more difficult question how to put a metric of positive sectional curvature on the total space of a fiber bundle.