

Dynamical Systems Seminar

Riemannian submersions with positive sectional curvature

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> Date: 16/09/2021 Time: 15:00

Abstract. A natural question in mathematics is how curvature affects the structure of a manifold. One conjecture that pictures well the situation is the Wilhelm Conjecture:

Suppose $M^{n+k} \to B^n$ is a Riemannian submersion with $\sec_M \ge 1$. Then n > k.

Here we prove an interesting case of this conjecture and present tools that could build dynamical approachs to the full conjecture.

References

 L. D. Sperança (2018). On Riemannian foliations over positively curved manifolds, J. Geom. Anal. 28, 3, 2018, 2206-2224.