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102  
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## Oberseminar Analysis und Theoretische Physik

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# Stable and unstable Einstein warped products

In this talk, we consider stability and instability of Einstein warped products with an Einsteinian fiber of codimension 1. Up to a small gap in the case of sin-cones, we determine the stability properties of such warped products by spectral properties of the Laplacian and the Einstein operator of the base manifold. These results yield plenty of new examples of stable and unstable Einstein manifolds with conical singularities: For example, sin-cones over symmetric spaces of compact type and high-dimensional Ricci-flat cones over Kähler-Einstein Fano manifolds are stable. On the other hand, sin-cones and low-dimensional Ricci-flat cones over product manifolds are unstable.

**Dienstag, 16.5.2017, 15:00 Uhr, Raum c311  
Hauptgebäude der Leibniz Universität**

Dazu laden herzlich ein:

Prof. Dr. Wolfram Bauer  
Prof. Dr. Olaf Lechtenfeld  
Prof. Dr. Christoph Walker

Prof. Dr. Joachim Escher  
Prof. Dr. Elmar Schrohe  
Prof. Dr. Emil Wiedemann