Conformal Lichnerowicz-Obata conjecture for Finsler metrics

Abstract:

Finsler metrics generalize the Riemann metrics like the Banach spaces do the Hilbert spaces. A popular game in mathematics is to take a statement from Riemannian geometry and generalize it for Finsler geometry. During my talk I will show a trick basing on the classical geometry which allows to play this game very effectively. As an application I will prove the Finsler version of the famous conformal Lichnerowicz-Obata conjecture.

The talk is based on joint papers with Rademacher, Troyanov and Zeghib.

Prof. Dr. Vladimir S. Matveev (Friedrich-Schiller-Universität Jena)