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Sectional Curvature Integrals

The sectional curvature of a Riemannian manifold M define a scalar function on the Graßmann-bundle $\mathrm{Gr}_2(TM)$ of 2–planes in TM. The talk will focus on the evaluation of the moments of this function in special examples in order to study the expectation value and the variance of the sectional curvature as well as the variation of the moments under a variation of the Riemannian metric.