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Title: The vanishing rate of Weil-Petersson sectional curvatures

Authors: Scott A. Wolpert

Abstract: The Weil-Petersson metric for the moduli space of Riemann surfaces has negative sectional curvature. Surfaces represented in the complement of a compact set in the moduli space have short geodesics. At such surfaces the Weil-Petersson metric is approximately a product metric. An almost product metric has sections with almost vanishing curvature. We bound the sectional curvature away from zero in terms of the product of lengths of short geodesics on Riemann surfaces. Analysis includes examination of holomorphic quadratic differentials and a Green's function. We give examples and an expectation for the actual vanishing rate.

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