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COUNTING SQUARE-TILED SURFACES AND INTERSECTION THEORY
ON THE MODULI SPACE OF ABELIAN DIFFERENTIALS

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Computing Masur–Veech volumes is the key to access most quantities in the dynamics of the moduli space of Abelian differentials. There are two ways to compute, by counting square-tiled surfaces and by intersection theory. We show how a combination of the two viewpoints leads to efficient formulas for Abelian differentials and give an outlook to the case of quadratic differentials.