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**Anja Bankovic\*** ([anja.bankovic@bc.edu](mailto:anja.bankovic@bc.edu)), Department of Mathematics, Boston College, Carney Hall, Chestnut Hill, MA 02467, and **Christopher Leininger**. *Spectral rigidity for  $q$ -differential metrics*.

In this talk we will discuss the set of metrics coming from  $q$ -differentials defined on closed surfaces of genus  $g > 1$ . For  $q > 2$ , we will extend the notion of singular measured foliations and define immersed singular measured foliations. Using immersed singular measured foliations and geodesic currents, we will prove a strong marked length spectral rigidity result for the space of all such flat metrics. This is a joint work with Christopher Leininger. (Received January 26, 2015)