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Kasra Rafi* (kasra.rafi@gmail.com), Dept. of Mathematics, 5734 S. University Avenue, Chicago, IL 60637, and **Moon Duchin** and **Christopher Leininger**. *A compactification for the space of singular Euclidean metrics on a surface.*

Let $F(S)$ be the space of singular Euclidean metrics of area one on a surface S . We provide an embedding of $F(S)$ into the space of geodesic currents on S . This is similar to Bonahon's embedding of Teichmüller space into the space of geodesic currents; the length of a closed curve in a given singular flat metric is equal to the intersection number of this curve with the corresponding geodesic current. The closure of the image of this embedding is a compact set. We also give a description of the boundary at infinity. (Joint work with Moon Duchin and Chris Leininger.) (Received January 27, 2009)