On Harmonic Measure of Critical Curves ILIA RUSHKIN, University of Chicago, ELDAD BETTELHEIM, University of Chicago, ILYA GRUZBERG, University of Chicago, PAUL WIEGMANN, University of Chicago — Fractal geometry of critical curves appearing in 2D critical systems is characterized by their harmonic measure. For systems described by conformal field theories with central charge $c \leq 1$ the scaling exponents of the harmonic measure have been computed by B. Duplantier [Phys. Rev. Lett. **84**, 1363 (2000)] by relating the problem to boundary two-dimensional gravity. We present a simple argument connecting the harmonic measure of critical curves to operators obtained by fusion of primary fields, and compute characteristics of the fractal geometry by means of regular methods of conformal field theory. The method is not limited to theories with $c \leq 1$.

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Date submitted: 30 Nov 2005   Electronic form version 1.4