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**Hung Lu\*** (hlu@hpu.edu), 1188 Fort Street Mall, suite 430, Honolulu, HI 96813, and **Michel L. Lapidus** and **Machiel van Frankenhuysen**. *Explicit tube formulas for  $p$ -adic fractal strings*.

We present an explicit volume formula for the tubular neighborhood of a  $p$ -adic fractal string  $\mathcal{L}_p$ , expressed in terms of the underlying complex dimensions. The general tube formula is illustrated by some simple examples, the nonarchimedean Cantor, Euler, and Fibonacci strings. (Received December 02, 2011)