

Hyperbolic random walks

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Drawn with the **lua**hyperbolic**** package. (<https://github.com/dmegy/luahyperbolic>) Every segment is a geodesic segment for the hyperbolic metric on the disk.

Notice how random walks in the hyperbolic disk tend to always escape to some point at infinity. For a mathematical statement and proof of this, see: Marc Yor, *Some Aspects of Brownian Motion , part II*, Birkhäuser, 1997. See also the very nice animation at https://www2.math.upenn.edu/~pstorm/hyperbolic_random_walk/.

