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Nathanael Berestycki* (N.Berestycki@statslab.cam.ac.uk), Statistical Laboratory, CMS – Wilberforce Rd., Cambridge, CB3 0WB, England. *Velocity gain for a self-repelling Brownian particle*. Preliminary report.

We consider one-dimensional Brownian motion conditioned (in a suitable sense) to have a local time at every point and at every moment bounded by some fixed constant. Our main result shows that a phenomenon of entropic repulsion occurs: that is, this process is ballistic and has an asymptotic velocity approximately 4.55 as high as required by the conditioning. I will also describe other conditionings of Brownian motion in which this entropic repulsion manifests itself.

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