RICCI FLOW, BROWNIAN MOTION AND ENTROPY

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We discuss Brownian motion on manifolds with time-dependent Riemannian metric. In particular, we present a criterion for non-explosion and an application to an entropy formula for Ricci flow on non-compact manifolds. This talk is based on joint work with Kazumasa Kuwada, Hongxin Guo and Anton Thalmaier.

References

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[2] K. Kuwada, R. Philipowski, Non-explosion of diffusion processes on manifolds with time-dependent metric. *Math. Z.* **268** (2011), 979–991.

[3] K. Kuwada, R. Philipowski, Coupling of Brownian motions and Perelman's $\mathcal{L}$-functional. *J. Funct. Anal.* **260** (2011), 2742–2766.