

Thomas Bayes' walk on manifolds

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(Submitted on 3 Jun 2012)

Convergence of the Bayes posterior measure is considered in canonical statistical settings where observations sit on a geometrical object such as a compact manifold, or more generally on a compact metric space verifying some conditions. A natural geometric prior based on randomly rescaled solutions of the heat equation is considered. Upper and lower bound posterior contraction rates are derived.

Subjects: **Statistics Theory (math.ST)**

MSC classes: 62G05, 62G20

Cite as: **arXiv:1206.0459 [math.ST]**(or **arXiv:1206.0459v1 [math.ST]** for this version)

Submission history

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[v1] Sun, 3 Jun 2012 16:25:37 GMT (52kb)

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