1.	Record Nr.	UNINA9910915676103321
	Autore	Ledrappier François
	Titolo	The Regularity of the Linear Drift in Negatively Curved Spaces
	Pubbl/distr/stampa	Providence : , : American Mathematical Society, , 2023 ©2023
	ISBN	1-4704-7320-8
	Edizione	[1st ed.]
	Descrizione fisica	1 online resource (164 pages)
	Collana	Memoirs of the American Mathematical Society ; ; v.281
	Classificazione	37D4058J65
	Altri autori (Persone)	ShuLin
	Disciplina	515/.39 516.352
	Soggetti	Geodesic flows Stochastic analysis Brownian motion processes Dynamical systems and ergodic theory -- Dynamical systems with hyperbolic behavior -- Dynamical systems of geometric origin and hyperbolicity (geodesic and horocycle flows, etc.) Global analysis, analysis on manifolds -- Partial differential equations on manifolds; differential operators -- Diffusion processes and stochastic analysis on manifolds
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Cover -- Title page -- Chapter 1. Introduction and statement of results -- Main notations and conventions -- Chapter 2. Preliminaries -- 2.1. Jacobi fields and the geodesic flow -- 2.2. Anosov flow and invariant manifolds -- 2.3. Harmonic measure for the stable foliation -- 2.4. Busemann function and the linear drift -- Chapter 3. Regularity of the linear drift -- 3.1. Regularity of the leafwise divergence term ^{ } \overline{ } -- 3.2. Regularity of the harmonic measure -- 3.3. Differentials of the linear drift -- Chapter 4. Brownian motion and stochastic flows -- 4.1. Parallelism and the Brownian motion -- 4.2. A stochastic analogue of the geodesic flow -- 4.3. Growth of the stochastic tangent maps in time -- 4.4. Brownian bridge and conditional estimations -- 4.5. Regularity of the stochastic analogue of the geodesic flow -- Chapter 5. The first differential of the heat kernels in metrics -- 5.1. Strategy -- 5.2. A description of _{ }^{ } -- 5.3. The

Sommario/riassunto

"We show that the linear drift of the Brownian motion on the universal cover of a closed connected smooth Riemannian manifold is Ck-2 differentiable along any Ck curve in the manifold of Ck Riemannian metrics with negative sectional curvature. We also show that the stochastic entropy of the Brownian motion is C1 differentiable along any C3 curve of C3 Riemannian metrics with negative sectional curvature. We formulate the first derivatives of the linear drift and stochastic entropy, respectively, and show they are critical at locally symmetric metrics"--