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Altri autori (Persone)	KumagaiTakashi WangJian <1979->
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Nota di contenuto	Cover -- Title page -- Chapter 1. Introduction and Main Results -- 1. Setting -- 2. Heat kernel -- Chapter 2. Preliminaries -- Chapter 3. Implications of heat kernel estimates -- 1. $\mathbb{UHK}(\cdot)(\mathbb{S}\mathbb{E},\mathbb{S}\mathbb{F})\mathbb{J}_{\{\cdot,\cdot\}}$, and $\mathbb{VHK}(\cdot)\mathbb{J}$ -- 2. $\mathbb{UHK}(\cdot)(\mathbb{S}\mathbb{E},\mathbb{S}\mathbb{F})\mathbb{S}\mathbb{C}\mathbb{S}\mathbb{J}(\cdot)$ -- Chapter 4. Implications of $\mathbb{C}\mathbb{S}\mathbb{J}(\cdot)$ and $\mathbb{J}_{\{\cdot,\cdot\}}$ -- 1. $\mathbb{J}_{\{\cdot,\cdot\}}\mathbb{F}\mathbb{K}(\cdot)$ -- 2. Caccioppoli and $\mathbb{1}$ -mean value inequalities -- 3. $\mathbb{F}\mathbb{K}(\cdot)+\mathbb{J}_{\{\cdot,\cdot\}}+\mathbb{C}\mathbb{S}\mathbb{J}(\cdot)\mathbb{E}$ -- 4. $\mathbb{F}\mathbb{K}(\cdot)+\mathbb{E}+\mathbb{J}_{\{\cdot,\cdot\}}\mathbb{U}\mathbb{H}\mathbb{K}\mathbb{D}(\cdot)$ -- Chapter 5. Consequences of condition $\mathbb{J}$ and mean exit time condition $\mathbb{E}$ -- 1. $\mathbb{U}\mathbb{H}\mathbb{K}\mathbb{D}(\cdot)+\mathbb{J}_{\{\cdot,\cdot\}}+\mathbb{E}\mathbb{U}\mathbb{H}\mathbb{K}(\cdot)$, $\mathbb{J}+\mathbb{E}\mathbb{U}\mathbb{H}\mathbb{K}(\cdot)$ -- 2. $\mathbb{J}+\mathbb{E}\mathbb{L}\mathbb{H}\mathbb{K}(\cdot)$ -- Chapter 6. Applications and Examples -- 1. Applications -- 2. Counterexample

-- Chapter 7. Appendix -- 1. Lévy system formula -- 2. Meyer's decomposition -- 3. Some results related to $\text{FK}(\cdot)$. -- 4. Some results related to (Dirichlet) heat kernel -- 5. $\text{SCSJ}(\cdot) + \text{J}_{\{\cdot\}}(\text{sE}, \text{sF})$ is conservative -- Acknowledgment -- Bibliography -- Back Cover.

Sommario/riassunto

"In this paper, we consider symmetric jump processes of mixed-type on metric measure spaces under general volume doubling condition, and establish stability of two-sided heat kernel estimates and heat kernel upper bounds. We obtain their stable equivalent characterizations in terms of the jumping kernels, variants of cut-off Sobolev inequalities, and the Faber-Krahn inequalities. In particular, we establish stability of heat kernel estimates for α -stable-like processes even with $\alpha = 2$ when the underlying spaces have walk dimensions larger than 2, which has been one of the major open problems in this area"--