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## On Harnack inequalities and optimal transportation

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**Abstract.** We develop connections between Harnack inequalities for the heat flow of diffusion operators with curvature bounded from below and optimal transportation. Through heat kernel inequalities, a new isoperimetric-type Harnack inequality is emphasized. Commutation properties between the heat and Hopf-Lax semigroups are developed consequently, providing direct access to heat flow contraction in Wasserstein spaces

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