A $C^1$ curve $\{x(\tau), -\infty < \tau \leq t_0\}$ is called a minimizer if, for any finite interval $[t_1, t_2]$, $-\infty < t_1 < t_2 < t_0$, and any $C^1$ curve $\{\overline{x}(\tau), -\infty < \tau \leq t_0\}$ that coincides with $x(\tau)$ outside the interval $(t_1, t_2)$, the inequality $A_{t_1,t_2}(x(\tau)) \geq A_{t_1,t_2}(\overline{x}(\tau))$ holds, where $A$ is an action functional minimizing the trajectories of a two-dimensional Hamiltonian system with a random potential expressed in terms of independent standard Wiener processes. The authors state without proof some geometric properties of such minimizers as well as a theorem of Hadamard-Perron type on the existence of local unstable manifolds related to minimizers.

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