

## ON EKELAND'S VARIATIONAL PRINCIPLE IN $b$ -METRIC SPACES

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**Abstract.** In this paper we prove a version of Ekeland's variational principle in  $b$ -metric spaces and, as a consequence, we obtain a Caristi type fixed point theorem.

**Key Words and Phrases:** Variational principle, fixed point, Caristi type theorem,  $b$ -metric space.

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