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## STRONG CONVERGENCE THEOREM FOR INFINITE FAMILY OF TOTAL QUASI-*φ*-ASYMPTOTICALLY NONEXPANSIVE MULTI-VALUED MAPPINGS

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**Abstract.** We prove strong convergence theorem for infinite family of uniformly L-Lipschitzian total quasi- $\phi$ -asymptotically nonexpansive multi-valued mappings using a generalized f-projection operator in a real uniformly convex and uniformly smooth Banach space. The result presented in this paper improve and unify important recent results announced by many authors. **Key Words and Phrases:** total quasi- $\phi$ -asymptotically nonexpansive multi-valued mapping, fixed

point, strong convergence, f-projection operator.

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