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**Dong Quan Ngoc Nguyen\*** ([dongquan@math.ubc.ca](mailto:dongquan@math.ubc.ca)), Department of Mathematics, University of British Columbia, 1984 Mathematics Road, Vancouver, BC V6T 1Z2, Canada. *Generalized Mordell curves, generalized Fermat curves, and the Hasse principle.*

We show that for each prime  $p \equiv 1 \pmod{8}$ , there exists a threefold  $X_p$  such that the existence of certain rational points on  $X_p$  produces families of generalized Mordell curves and families of generalized Fermat curves violating the Hasse principle explained by the Brauer-Manin obstruction. We also introduce a notion of the descending chain condition for sequences of curves, and prove that there are sequences of generalized Mordell curves and generalized Fermat curves satisfying the descending chain condition. (Received September 19, 2012)