

1067-53-1156

Wah-Kwan Ku* (wku@indiana.edu), 831 E 3rd Street, Rawles Hall, Bloomington, IN 47405,
and **Marlies Gerber**, 831 E 3rd Street, Rawles Hall, Bloomington, IN 47405. *A dense G -delta of Riemannian metrics without the finite blocking property.*

A pair of points (x, y) in a Riemannian manifold (M, g) is said to have the finite blocking property if there is a finite set $P \subset M \setminus \{x, y\}$ such that every geodesic segment from x to y passes through a point of P . We show that for every closed C^∞ manifold M of dimension at least two and every pair $(x, y) \in M \times M$, there exists a dense G_δ set, \mathcal{G} , of C^∞ Riemannian metrics on M such that (x, y) fails to have the finite blocking property for every $g \in \mathcal{G}$. This is joint work with Marlies Gerber. (Received September 19, 2010)