

A. L. Dontchev (ald@ams.org), Mathematical Reviews, Ann Arbor, MI 48107-8604, *An Inverse Function Theorem for Metrically Regular Mappings*

We prove that if a mapping $F : X \rightrightarrows Y$, where X and Y are Banach spaces, is metrically regular at \bar{x} for \bar{y} and its inverse F^{-1} is convex and locally closed-valued around (\bar{x}, \bar{y}) , then for any function $G : X \rightarrow Y$ with $\text{lip } G(\bar{x}) \cdot \text{reg } F(\bar{x}|\bar{y}) < 1$, the mapping $(F + G)^{-1}$ has a continuous local selection $x(\cdot)$ around $(\bar{x}, \bar{y} + G(\bar{x}))$ which is also calm.