1047-30-90Leonid V. Kovalev* (lvkovale@syr.edu), Department of Mathematics, Syracuse University,
215 Carnegie Building, Syracuse, NY 13244-1150, and Jani Onninen. On invertibility of Sobolev
mappings. Preliminary report.

We prove local and global invertibility of Sobolev solutions of differential inclusions $Df(x) \in K$ a.e., where K is a certain set of $n \times n$ matrices. This result is new (and sharp) even for quasiregular mappings in two dimensions. (Received January 19, 2009)