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Josefina Alvarez* (jalvarez@nmsu.edu), Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003-8001. *The Nemytsky Operator and a Variable-Coefficient Version of Lusin's Theorem.*

The Nemytsky operator is a variable-coefficient composition operator of the form $\varphi(x) \rightarrow f(x, \varphi(x))$. The function $f(x, u)$ is assumed to be measurable on x and continuous on u . Following the work of M. M. Vainberg, we present a variable-coefficient Lusin's theorem, characterizing the function f in terms of almost-continuity. (Received August 21, 2008)