Marian Bocea* (mbocea@luc.edu), Loyola University Chicago, Department of Mathematics and Statistics, 1032 W. Sheridan Road, Chicago, IL 60660, and Mihai Mihailescu (mmihailes@yahoo.com), University of Craiova, Department of Mathematics, 13 A. I. Cuza St., 200585 Craiova, Romania. On the continuity of the Luxemburg norm of the gradient in variable exponent Lebesgue spaces.

We study, via Γ-convergence, the continuity of the Luxemburg norm of the gradient in $L^{p(·)}$ with respect to $p(·)$. The minimum values of closely related “Rayleigh quotient” type functionals are shown to converge to a corresponding quantity associated to the Γ-limit. (Received September 25, 2012)