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**Partial differential equations.** — *Approximating the inverse matrix of the G-limit through changes of variables in the plane*, by GIOCONDA MOSCARIELLO, CARLO SBORDONE and FRANÇOIS MURAT, communicated on 10 March 2006.

ABSTRACT. — Let $A_j$ be a sequence of coercive symmetric matrices in $L^\infty(\mathbb{R}^2)^{2\times 2}$ with $\det A_j = 1$ which $G$-converges to $A$. We prove that there exists a sequence of $K$-quasiconformal mappings $F_j$ which converge locally uniformly to a $K$-quasiconformal mapping $F$ such that $A_j^{-1} \circ F_j^{-1}$ $G$-converges to $A^{-1} \circ F^{-1}$. The result is specific to the two-dimensional case but a similar result holds in dimension 1.

KEY WORDS: $G$-convergence; quasiconformal mappings; Beltrami operators; elliptic equations.

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