On the laminates generated by 2×2 symmetric gradients

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March 28, 2006

([P. Pedregal, Some remarks on quasiconvexity and rank-one convexity, Proc. Roy. Soc. Edimb. 126A (1996) 1055-1065]) considered, for deformations $u: \Omega \subset \mathbf{R}^2 \to \mathbf{R}^2$, the laminates generated by symmetric gradients

$$\nabla u = x \begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix} + y \begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix} + z \begin{pmatrix} 1 & 1 \\ 1 & 1 \end{pmatrix},$$

with $\max\{|x|, |y|, |z|\} \le 1$, having barycenter (0, 0, 0).

We have tried to characterize such laminates, not only for (0, 0, 0), but also for other barycenters, like $(\frac{1}{3}, \frac{1}{3}, 0)$ and $(\frac{1}{2}, \frac{1}{2}, 0)$.