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Lorenzo J. Díaz* (lodiaz@mat.puc-rio.br), Departamento de Matemática PUC-Rio, Rua Marquês de São Vicente 225, Gávea, 22453-900 Rio de Janeiro, RJ, Brazil. *Homoclinic classes, periodic points, and Lyapunov exponents.*

The index of a hyperbolic saddle is the dimension of its unstable bundle. We prove that there is a residual subset \mathcal{R} of the space of C^1 -diffeomorphisms with the following property: For every diffeomorphism $f \in \mathcal{R}$ and every saddle P of f , the indices of the saddles in the homoclinic class of P form an interval in \mathbb{N} . We deduce some dynamical properties from this fact. (Received February 13, 2006)