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## Fixed point indices of iterated smooth maps

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(joint work with Jerzy Jezierski and Piotr Nowak-Przygodzki)

Let  $f$  be a smooth self-map of  $\mathbb{R}^n$ , where  $n$  is an arbitrary natural number. We give a complete description of possible sequences of indices of iterations of  $f$  at an isolated fixed point. We apply this result to determine the minimal number of  $r$ -periodic points in smooth homotopy class of a given self-map of a compact manifold.