

# Minimal number of periodic points of smooth boundary-preserving self-maps of simply-connected manifolds

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Let  $M$  be a smooth compact connected and simply-connected manifold with simply-connected boundary  $\partial M$ ,  $r$  be a fixed odd natural number. We consider  $f$ , a smooth self-maps of  $M$ , preserving  $\partial M$ . Under the assumption that the dimension of  $M$  is at least 4, we define the invariant  $D_r(f; M, \partial M)$  that is equal to the minimal number of  $r$ -periodic points for all maps preserving  $\partial M$  and smoothly homotopic to  $f$ . We estimate the value of  $D_r(f; M, \partial M)$  for some values of  $r$ .

## References

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