

The Nielsen numbers of iterations of maps on infra-solvmanifolds of type (R) and periodic points

Jong Bum Lee

Sogang University, Korea

jlee@sogang.ac.kr

The talk is based on the joint work with A. Fel'shtyn, [2].

Session: 35. Topological fixed point theory and related topics

Utilizing the arguments employed mainly in [1] and [3] for the Lefschetz numbers of iterations, we study the asymptotic behavior of the sequence of the Nielsen numbers $\{N(f^k)\}$, the essential periodic orbits of f and the homotopy minimal periods of f by using the Nielsen theory of maps f on infra-solvmanifolds of type (R).

References

- [1] I. K. Babenko and S. A. Bogatyĭ, The behavior of the index of periodic points under iterations of a mapping, *Izv. Akad. Nauk SSSR Ser. Mat.*, 55 (1991), 3–31 (Russian); translation in *Math. USSR-Izv.*, 38 (1992), 1-26.
- [2] A. Fel'shtyn and J. B. Lee, The Nielsen numbers of iterations of maps on infra-solvmanifolds of type (R) and periodic points, [arXiv:1403.7631](https://arxiv.org/abs/1403.7631).
- [3] J. Jezierski and W. Marzantowicz, *Homotopy Methods in Topological Fixed and Periodic Points Theory*, *Topological Fixed Point Theory and Its Applications*, 3, Springer, Dordrecht, 2006.