## MA 771 Exercises

2.5. Given an orientation-preserving homeomorphism  $f: S^1 \to S^1$  with no periodic points, we defined a number  $s_f$  in class using "next nearest neighbors" and continued fractions. Show that  $s_f = \rho_f$  in  $\mathbb{R}/\mathbb{Z}$  ( $\rho_f$  denotes the rotation number of f).

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