1117-37-60 **Jan P. Boronski*** (jan.boronski@osu.cz) and **Piotr Oprocha**. *On dynamics of the Sierpinski Carpet.*

In 1993, Aarts and Oversteegen proved that the Sierpiński curve S admits a transitive homeomorphism, answering a question of Gottschalk. They also showed that it does not admit a minimal one. Earlier, in 1991 Kato proved that S does not admit expansive homeomorphisms. In 2007 Biś, Nakayama and Walczak proved that S admits a homeomorphism with positive entropy, and that it admits a minimal group action. We show that S admits homeomorphisms with strong mixing properties. Namely, there is a homeomorphism $H : S \to S$ that has a fully supported measure m, such that (H, m) is Bernoulli, H has a dense set of periodic points, and H does not have specification property. In particular, S admits a topologically mixing homeomorphism. (Received December 30, 2015)