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Statistical properties of intermittent generalized baker's transformation via anisotropic Banach spaces and renewal methods

We construct Banach spaces with anisotropic norms adapted to the dynamics of a class of generalized baker's transformations, which are piecewise non-uniformly hyperbolic maps on the unit square (see Bose Murray 2013, Bose 1989, Alexander Yorke 1984, Tsujii 2001, Rams 2003). We apply operator renewal theory (see Sarig 2002, Gouezel 2004) to analyse the action of the transfer operators associated to these maps and deduce their statistical properties.