

On the measure of the set of regular parameter values for the quadratic map

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An efficient method to find all low-period windows for the quadratic map is presented. The method is used to obtain very accurate rigorous bounds of positions of all periodic windows with periods $p \leq 36$. Properties of periodic windows are studied numerically. The contribution of period-doubling windows and period-tupling windows on the total width of periodic windows is discussed. An estimate of the measure of the set of regular parameter values is computed.