1092-37-157 **Lluís Alsedà** and **Michał Misiurewicz***, mmisiure@math.iupui.edu. *Mystery of the Vanishing Attractor.*

Consider a skew product $F : B \times X \to B \times X$, given by $F(b, x) = (R(b), f(b, x))$. It can be regarded as a random system, Strange Nonchaotic Attractor, Iterated Function System, nonautonomous system, etc. In many cases the dynamics of R in the base is well understood, and one investigates what happens in the fibers. Therefore it makes sense to consider an attractor which is a graph of a (measurable or Borel) function $\varphi : B \to X$, and "attractor" means that the distance (in the corresponding fiber) of the second component of $F^n(b, x)$ from the value of φ at the first component goes to 0 as $n \to \infty$ for almost all starting points (b, x). If (B, R) is a Bernoulli shift, we can consider one-sided and two-sided systems. We give two examples (one very simple and one more complicated) where the attractor exists for the two-sided system, but not for the one-sided one. This is a paradox, since the definition of the attractor involves only the future, but the attractor vanishes when we forget about the past. Moreover, the past and future are independent of each other! (Received August 07, 2013)