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Stefania Patrizi* (spatrizi@math.utexas.edu), 2515 Speedway, Austin, TX 78712, and
Serena Dipierro and **Enrico Valdinoci**. *Chaotic Orbits for Systems of Nonlocal Equations*.

We consider a system of nonlocal equations driven by a perturbed periodic potential. We construct multibump solutions that connect one integer point to another one in a prescribed way. In particular, heteroclinic, homoclinic and chaotic trajectories are constructed. This is the first attempt to consider a nonlocal version of this type of dynamical systems in a variational setting and the first result regarding symbolic dynamics in a fractional framework. (Received August 30, 2016)