

Motions of a bouncing ball

Stefano Marò

Stefano Marò (stafano.maro@unito.it)

Università di Torino

Abstract.

We consider the model describing the vertical motion a ball falling with constant acceleration on a racket and elastically reflected. The racket is supposed to move in the vertical direction according to a periodic function f . We discuss the existence of bounded and unbounded motion of the ball.

References

- [1] Marò, S. Coexistence of bounded and unbounded motions in a bouncing ball model. *Nonlinearity* **26** (2013), 1439–1448.