

Modelling the oscillation of walking humans

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1 Introduction

1.1 Aim

The aim of this investigation is, using mathematical functions, to model the vertical oscillation of the human body while walking.

1.2 Applications

There are numerous applications of modern technology where being able to model the oscillation from walking is invaluable. For example, optical image stabilization present in nearly all modern video cameras aims to minimize the 'screen shake' by compensating with movement in the lens of the camera. A model of oscillation while walking could aid this endeavor by allowing more predictable corrections to be made by software.