

Why suitcases rock and fall over – puzzle solved

科学家解开拉杆箱摇摇欲倒的物理谜题

- 請注意：中文文字内容只提供簡體版

相信很多人都对下面的这个情景深有体会：为了赶火车或飞机，我们费力地拖着一个两轮拉杆箱向前奔跑，而箱子会左右摇晃，眼看着就要翻倒，着实让人提心吊胆。现在，科学家们已经针对这个令人费解的日常物理难题展开了研究调查，结果他们发现，避免该现象的方法可能和我们的预期有所不同。请听报道。

It's a common experience when **dashing** for a train while **lugging** a **two-wheeled suitcase**, the bag **rocks alarmingly from side to side** and **threatens** to **overturn**.

To explain why this happens, French researchers studied a model suitcase on a **treadmill** and did some **number-crunching**. And it turns out, that rather than slowing down, as you might expect, you should actually speed up to **tame** your **unruly** suitcase.

Scientists say, while it's a fun way to tackle the problem, the study could have **applications** with other two-wheeled things from **trailers** to **caravans**.

词汇表

dashing	猛冲，突然奔跑
lugging	用力拖着
two-wheeled	两轮的
suitcase	行李箱，这里指拉杆箱
rocks	摇晃，摇摆
alarmingly	令人惊慌地，让人担忧地
from side to side	左右、来回地
threatens	预示着、快要发生（不好的事情）
overturn	翻倒
treadmill	跑步机
number-crunching	（人或计算机进行的简单而耗时的）数字运算
tame	控制，驾驭
unruly	难控制的，难驾驭的
applications	用途，应用
trailers	（卡车后的）挂车
caravans	（尤指用汽车拖着走的）旅行房车

测验

请听报道并回答下列问题。

1. What did French researchers do to explain the suitcase puzzle?
2. What applications could the study have, according to the scientists?
3. True or false? *To control our suitcases, we should speed up rather than slow down.*
4. Which word in the text means 'to deal with something difficult with determination'?

答案

1. What did French researchers do to explain the suitcase puzzle?
To explain the suitcase puzzle, French researchers studied a model suitcase on a treadmill and did some number-crunching.
2. What applications could the study have, according to the scientists?
The study could have applications with other two-wheeled things from trailers to caravans, according to the scientists.
3. True or false? *To control our suitcases, we should speed up rather than slow down.*
True. It turns out that rather than slowing down, as we might expect, we should actually speed up to tame our unruly suitcases.
4. Which word in the text means 'to deal with something difficult with determination'?

Tackle.