The Top Floor is Out of This World　太空电梯，直达云霄

Launching rockets into outer space requires a lot of scientific knowledge and is extremely expensive. It costs up to US$20,000 to put a single kilogram into space. There is a way to change that, but when they first hear about it, people think it is a crazy idea.

想发射火箭至外层空间，不但需要渊博的科学知识，而且代价昂贵。将物品运送至外层空间的费用高达每公斤两万美元。有个方法可以改变现状，但当这个想法第一次被提出时，大家认为那真是太疯狂了。

In 1985, the science-fiction writer Arthur C. Clarke said that "the space elevator will be built about 50 years after everyone stops laughing."In 2003, he changed his **prediction** slightly and said, "It'll be about ten years after everybody stops laughing, and I think they have [already] stopped."

1985 年，科幻小说家克拉克说：「太空电梯将在人们停止嘲笑这个点子后，再过五十年完成。」2003 年时，他稍稍修正了预测：「太空电梯将在人们停止嘲笑这个点子后，再过十年完成。而且，我认为大家已不再讥笑了。」

But how can this be possible? Think of a very long cable with a large weight tied to one end. Launch this weight into space high enough so that it will orbit the earth, and bring the cable back to earth and tie it **in place** at the **equator**. Once this is done, a vehicle could **literally** drive up into and down from space. It would be …. A space elevator!

但这怎么办到呢？想象一条非常长的缆线，尾端绑着巨大沈甸甸的重物，将这个重物向上高射，直到它环绕地球。然后，将这个缆线拉回地球，并且将它固定在赤道。一旦完成后，就真的可以驾驶运输工具进入太空，并且再回到地球。这将是一座……太空电梯！

The biggest problem with that **concept**, however, was finding a material strong enough for the cable. That's not a problem anymore, thanks to a new technology called carbon nanotubes, which may provide to have the right strength. If the space elevator can be built, the cost of sending one kilogram into space would drop to as low as a few hundred dollars. It would be **invaluable** for scientific exploration as well as for **missions** to the moon or Mars. It is an exciting possibility that might just become reality in the near future!

然而，这个概念的最大问题在于，如何找到够强韧的物质来做缆线。但由于「奈米碳管」这项新科技的问世，这个问题已不存在。奈米碳管经证实可能拥有足够的强韧度。如果真的能够建造太空电梯，那么将物品运送至太空的每公斤成本将会大幅下降至数百美元。这对科学探险，还有月球及火星任务将珍贵无比。这令人兴奋的可能性，将在不久的将来实现。

–by Joseph Schier

Vocabulary

literally [ˋ lɪtərəlɪ] adv. 正确地；实在地，不加夸张地

prediction [prɪ ` dɪkʃən] n. 预言

invaluable [ɪn ` væljəb!] adj. 无价的

More Information

launch [lɔntʃ] v. 发射

in place 在正确的地方 prepared; available

equator [ɪ ` kwetə-] n. 赤道

concept [` kɑnsɛpt] n. 概念，观念

mission [` mɪʃən] n. 任务