ATHANASSIOS KALIUDIS

A laser lightning rod for Doc Brown

Both on Earth and in space, laser technology is making the world a safer place. Plus: a new writer is ready to take the world of science fiction by storm!

Lasers in space are the stuff that science fiction is made of. But it never understood that the laser is on the side of the good. I would bet that when you hear the words "lasers in space" you immediately think of super weapons, annihilation and war, most likely with images of Star Wars and lightsabers flashing through your head. It's a real shame, because laser technology is on the brink of staging a revolution in orbit that promises benefits all round.

"Geoengineering" tends to have the same negative connotations as "lasers in space". Interfering in the Earth's geochemical cycle is seen as downright disreputable. Yet Professor Jean-Pierre Wolf, weather research luminary at the University of Geneva, argues exactly the opposite, namely that by fully engaging with geoengineering, we can gain valuable insights to help us combat challenges such as climate change. His weapon of choice – now I have the war metaphors firmly stuck in my head! – is a one-of-a-kind super laser known as the laser lightning rod, or LLR. For the past few months, the LLR has been undergoing field trials at the summit of Säntis, a mountain in the Swiss Alps, where it has been teasing lightning out of the clouds. You might call it geoengineering, but with the noble aim of making the world a little bit safer by controlling lightning.

If only someone had told Doc Brown! The scientific genius from the science-fiction trilogy Back to the Future, which achieved cult status in the late 1980s, retrofitted a DMC DeLorean into a time machine. The car uses plutonium to generate the 1.21 gigawatts of power it needs to travel through time. However, a lightning strike hitting the DeLorean can also generate enough power to warp spacetime. This is a key plot point in the first part of the trilogy when Doc Brown's friend, Marty McFly, gets stuck in the past without any plutonium and has to find an alternative way of getting back to the future. Fortunately, his knowledge of the future means he knows exactly where and when the next lightning bolt will strike, namely the iconic town hall clock that has remained stuck at that time since the strike occurred. In the second part of the trilogy, lightning plays a much more accidental role, striking the time machine as it's flying – yes, flying! – through a thunderstorm and inadvertently transporting it to the Wild West. Life would have been a lot easier for Doc Brown and Marty McFly if they had known about the laser lightning rod.

A laser that controls lightning! It's amazing what laser technology can do. Once again, it's extraordinary enough to rekindle my dreams of becoming a science-fiction writer. After all, someone has to make it clear to this genre once and for all that lasers are a force for good!

ATHANASSIOS KALIUDIS

通快激光技术事业部新闻发□□

通快媒体公关，企业公关