Manipulating Lasers

A laser is a very special kind of light. For example, light from a laser is emitted in only one direction, in contrast to other sources, such as incandescent bulbs, in which different directions occur. Lasers can contain one or different colors combined, like sun light. It can even contain ones that you can not see!

There are many applications for lasers, many of which you are familiar with. For example, we use them to read CD's and DVD's, and in medicine, they are used as scalpels. But, not everything is already known about lasers. There are many possible future applications! Some of these require manipulating the relative movement between light of different colors. That's what I do. For this, we need to separate the laser in its components, then retard or advance a color with respect to the others, and finally to combine the colors again. This manipulation is very powerful, and is leading to new exciting applications of lasers.

-Yves Paul Coello