

Optica fantastica: images to illuminate the physics of light

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Seas sparkle, sunshine generates rainbows, ships make waves. The explanations of these familiar phenomena are as abstract as elsewhere in physics, but pictures are helpful because in light and water waves we can often see what we are talking about. There are other optical phenomena that are not immediately perceived (associated with polarization or fine-scale interference, for example), but even with these we can generate pictures to help our understanding. Poets and novelists, as well as painters, have sometimes represented optical phenomena in ways that are surprisingly close to those of physicists.