

Using PowerPoint XP to create easy-to-understand animations of optical effects

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Abstract: Microsoft PowerPoint XP adds many animation features not present in earlier versions of the software. The purpose of this paper is to call attention to how this software can be used to construct powerful, easy-to-understand animations of simple and complex optical effects. Several examples will be presented.

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OCIS codes: (140.3460) Lasers; (000.2060) Education

If a picture is worth a thousand words, then an animated picture must be worth many thousands of words. The ability to show students an animation of an effect can be a very powerful teaching tool. Most people have access to the XP version of Microsoft PowerPoint, and with only a little practice they can learn to construct very useful animations for use in a classroom setting. This paper hopes to inspire teachers to utilize this tool they already have to improve the clarity of their explanations of optical effects.

Several examples of PowerPoint animations will be shown, including stimulated emission, the role of optics in telecom, and the use of a fiber Bragg grating to compensate for dispersion in optical fiber.