

## CHAPTER OVERVIEW

### 10: Lasers

One of the most important tools in scientific measurement and the development of technology in general is the **laser**. The word “laser” is an acronym for Light Amplification by Stimulated Emission Radiation. What a laser does is use a spectroscopic transition to amplify the intensity of a light source by stimulating emission from the upper state of the transition. In order to do this, the system must have a population inversion.

[10.1: Fractional Population of Quantum States](#)

[10.2: Types of Lasers](#)

[10.3: Examples of Laser Systems](#)

[10.4: Laser Spectroscopy](#)

[10.5: References](#)

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