

VIII. STROBOSCOPIC RESEARCH

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RESEARCH OBJECTIVES

Intermittent light is an essential component of a very highly specialized type of instrumentation that involves precise flash timing and uses photography for recording. The main object of this work is usually to aid the eye to observe fast actions and to make accurate measurements.

For example, the experimental information about elementary particles and interactions which is now so eagerly sought by nuclear physicists is recorded by electronic flash lamps during the brief moment in the cloud chamber after expansion. Then begins the tedious work of reducing the data from the photographs. Our laboratory has helped many physicists with the illumination problem for the cloud chamber.

In addition to the application work on direct instrumentation, the Stroboscopic Light Laboratory is vitally concerned with the development of flash sources of many types and for many uses. Each year brings advancement, usually through theses of students in the Departments of Electrical Engineering and of Physics.

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