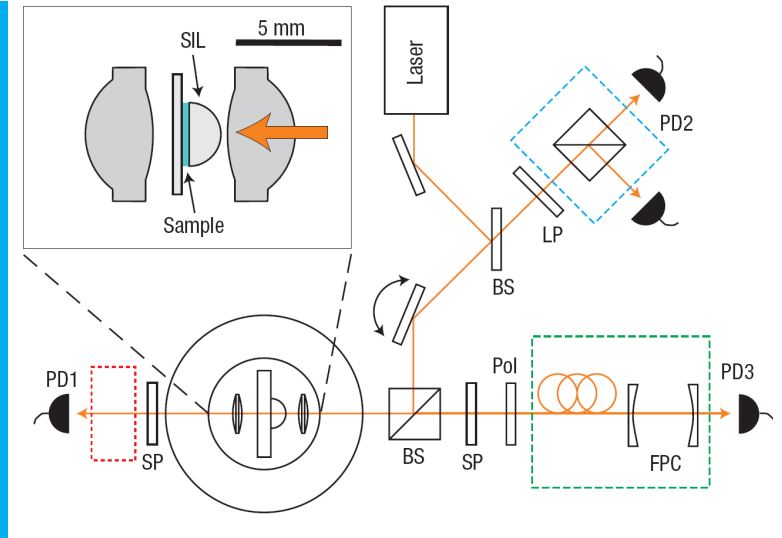


Experimental Optics

Unofficial Summer Workshop

*Please come and join us for the:
First Organizational Meeting
Wednesday, April 16th
5:30pm in B&H 455*



Objectives

To provide optics researchers at Brown an opportunity to design & fabricate common experimental setups. To leverage our collective expertise to train one another and quickly develop new experimental systems.

Workshop-Based Format

Experimental setups will be selected by participants based on their own research interests

Flexible Schedule

We plan to meet for weekly lab session, but the precise details will be determined at first meeting. Experimental schedule will be designed to accommodate student needs and absences.

Potential Experiment Setups

- Single-Photon Confirmation with 2nd Order Correlation Measurements
- Creating Radial & Azimuthal Polarized Beams or Laguerre-Gaussian Beams
- Wide-Angle Interference for Characterizing Multipolar Emission
- Confocal, Time-Resolved Photoluminescence Microscopy
- Optical Trapping of Quantum Dots and Nanowires as Near-Field Probes
- Modifying and Monitoring Emission Polarization in Scanning Near-Field Microscopy
- Or any other setups of interest to you and your labmates.

For: Researchers in labs from Engineering, Physics, Chemistry, etc. who are interested in experimental optics.

Ref. Books: The Quantum Theory of Light, by R. Loudon
Principles of Nano-Optics, by L. Novotny & B. Hecht
Lasers, by A. E. Siegmann

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