Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Optical Fiber Tapers for Characterization of Novel Photonic Crystal Devices JENNA HAGEMEIER, Physics Department, University of California, Santa Barbara, JAN GUDAT, Huygens Laboratory, University of Leiden, The Netherlands, SUSANNA THON, Physics Department, University of California, Santa Barbara, DIRK BOUWMEESTER, Physics Department, University of California, Santa Barbara and Huygens Laboratory, University of Leiden, The Netherlands — Optical fiber tapers are a useful tool for near-field spectroscopy of solid state devices. There are advantages to using fiber tapers rather than other waveguides because they can be moved spatially with respect to the device being studied, a single taper can be used for both pumping and data collection, and they can be used to probe bare cavities. The experimental procedures and challenges for building these micron-scale tapers will be discussed, as well as their uses for probing new kinds of photonic crystal cavities.

Jenna Hagemeier
Physics Department, University of California, Santa Barbara

Date submitted: 21 Nov 2008 Electronic form version 1.4