Subwavelength Optical Microscopy in Far-Field\textsuperscript{1} QINGQING SUN, Texas A&M University, MOHAMMAD AL-AMRI, King Abdul-Aziz City for Science and Technology, MARLAN SCULLY, Texas A&M University, Princeton University, SUHAIL ZUBAIRY, Texas A&M University — We present a complete procedure for subwavelength optical microscopy. The identical atoms are distributed on a plane disk and shined with a standing wave. We rotate the disk to different angles and record the resonant fluorescence spectra in far-field, from which we can obtain their distance and location information. This procedure also works for atomic separation above one wavelength and so provides a seamless microscopy.

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