

Abstract Submitted
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Subwavelength Optical Microscopy in Far-Field¹ QINGQING SUN,
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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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