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Electronic Noise in Optical homodyne Tomography
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LVOVSKY, IQIS U of C, IQIS U OF C TEAM — In experiments on
homodyne tomography of light, the electronic noise of the detector of-
ten prevents the observation of the fine details of the quantum state's
marginal distributions. We have shown that the noise contribution from
the detector can be modeled by an equivalent inefficiency arising due to
optical loss. We confirm this result using a non-classical squeezed light
produced with an optical parametric amplifier.

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