Title:	Quantum state estimation using weak measurements
Authors:	Das, Debmalya (/jspui/browse?type=author&value=Das%2C+Debmalya) Arvind (/jspui/browse?type=author&value=Arvind)
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Abstract:	We explore the possibility of using 'weak measurements' without 'weak value' for quantum state estimation. Since for weak measurements the disturbance caused during each measurement is small, we can rescue and recycle the state, unlike for the case of projective measurements. We use this property of weak measurements and design schemes for quantum state estimation for qubits and for Gaussian states. We show, via numerical simulations, that under certain circumstances, our method can outperform the estimation by projective measurements. It turns out that ensemble size plays an important role and the scheme based on recycling works better for small ensembles.
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