Squeezed States of Light

PH3203 Term Paper



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1. Introduction

2. Literature Review

3. A Primer

4. Coherent States

5. Squeezed States

5.1 Variance of Squeezed States(P representation)



The Variance of the X_1 operator, the glauber sudarshan P representation of the squeezed state is given by

$$V(X_1) = \frac{1}{4} \bigg[1 + \int d^2 \alpha P(\alpha) \big\{ (\alpha + \alpha^*) - \big(\langle a \rangle + \big\langle a^\dagger \big\rangle \big) \big\}^2 \bigg]$$

Bibliography



Bibliography