Optimization and limits of optical nonlinear measurements using imaging technique

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Résumé en anglais	We report on analytical calculations for a 4f coherent imaging system in presence of a phase object at the entry of the set-up. We give the results of the optimized parameters to be used in this system so as to increase the sensitivity of the measurement of the nonlinear refraction coefficient. Analytical and previously reported simulated image profiles are compared here. Our study also gives the limits of the nonlinear imaging technique with a phase object for relatively high nonlinear phase shifts.
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