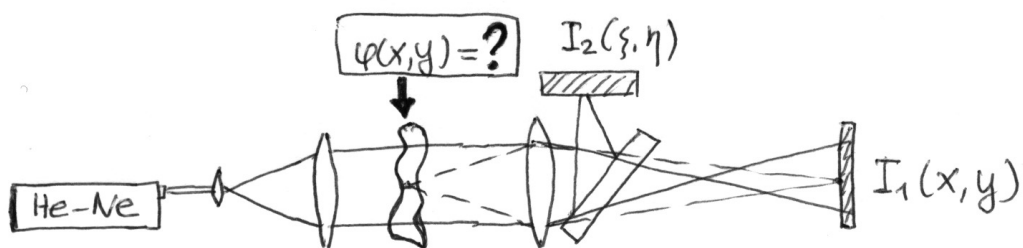


АЛГОРИТМ ГЕРЧБЕРГА-САКСТОНА
(Gerchberg & Saxton, 1972)



1. $g(x, y) = \sqrt{I_1(x, y)} e^{i \text{rnd}(2\pi)}$
2. $G(\xi, \eta) = \hat{\mathcal{F}}\{g(x, y)\}$
3. $G'(\xi, \eta) = \sqrt{I_2(\xi, \eta)} e^{i \arg[G(\xi, \eta)]}$
4. $g'(x, y) = \hat{\mathcal{F}}^{-1}\{G'(\xi, \eta)\}$
5. $g(x, y) = \sqrt{I_1(x, y)} e^{i \arg[g'(x, y)]}$
6. if $\| |g(x, y)| - \sqrt{I_1(x, y)} \| > \epsilon_1$ or $\| |G(\xi, \eta)| - \sqrt{I_2(\xi, \eta)} \| > \epsilon_2$ then goto 2
7. $\varphi(x, y) = \arg[g(x, y)]$