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**Multiscale spectra of weak optical turbulence in random Kerr media**[1] VLADIMIR MALKIN, NATHANIEL FISCH , Princeton University — A broad class of multiscale spectra of weak optical turbulence is found analytically within the kinetic equation describing nonlinear four-wave scattering combined with linear wave scattering in random statistically uniform Kerr media. This is accomplished by using the generalized Kolmogorov locality approach that enables expressing k-space integrals in the kinetic equation for waves by explicit formulas local in k-space.

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