

Constant flux relation in wave turbulence

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Generalizing Zakharov's approach to wave turbulence, we derive exact scaling of flux-measuring correlation functions in wave turbulence. Our answers hold true even in the regime of large non-linearity and can be used for studying wave turbulence systems outside of weak turbulence limit.

Main references:

- [1] C. Connaughton, R. Rajesh and O. Zaboronski , “Constant Flux Relation for Driven Dissipative Systems”, *Phys. Rev. Lett.* 98, 080601 (2007).
- [2] C. Connaughton, R. Rajesh and O. Zaboronski, “Constant Flux Relation for diffusion limited cluster–cluster aggregation”, *Phys. Rev E* 78, 041403, 2008.