

Abstract Submitted  
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**Observation of Phillips's spectrum in Faraday waves**<sup>1</sup> GUSTAVO CASTILLO, CLAUDIO FALCON, Universidad de Chile — We consider the problem of wave turbulence generated by singularities from an experimental point of view. We study a system of Faraday waves interacting with waves generated by a wave-maker driven with a random forcing. We measure the temporal fluctuations of the surface wave amplitude at a given location and we show that for a wide range of forcing parameters the surface height displays a power-law spectra that greatly differs from the one predicted by the WT theory. In the capillary region the power spectrum turns out to be proportional to  $f^{-5}$ , which we believe is due to singularities moving across the system.

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Gustavo Castillo  
Universidad de Chile

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