

Quantum-like behavior at Macroscopic Scale (Analysis)

Marcel Reis Soubkovsky*

University of Lorraine, Master's in Applied Physics and Physics Engineering

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Write this at last

Structure:

I. PHYSICAL PHENOMENON

A bath filled with a fluid can hold a droplet of the same fluid when put into vertical vibration.[1] The droplet is kept bouncing over the fluid

A. Faraday Wave and Threshold

Show the functioning of the theory that enables us to understand it.

B. Experimental Apparatus used by Harris, Moukhtar, Fort, Couder, and Bush

II. SIMILARITIES TO QUANTUM PHENOMENA

A. Patterns formed by free moving droplets

B. Diffraction and Interference of bouncing droplet

1. Single and Double Slit

C. Circular Corral

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- [1] Couder, Y., Fort, E., Gautier, C.-H., and Boudaoud, A., *Physical Review Letters* **94** (2005), 10.1103/PhysRevLett.94.177801.

* marcel.soubkovsky4@etu.univ-lorraine.fr