

Faraday waves with inhomogeneous localized injection in a quasi-unidimensional system

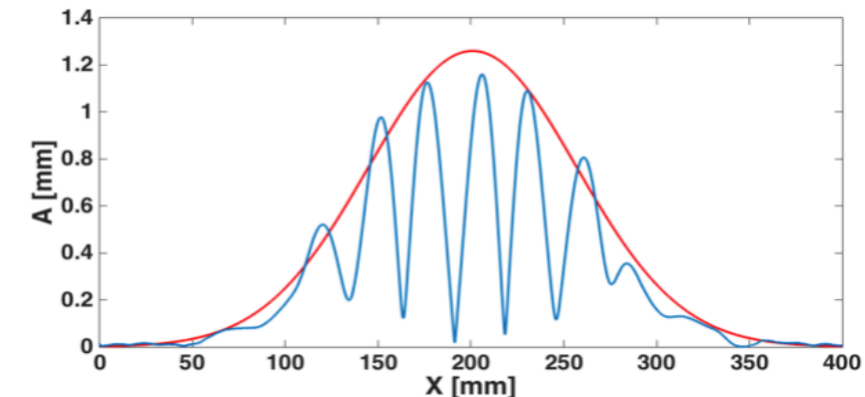
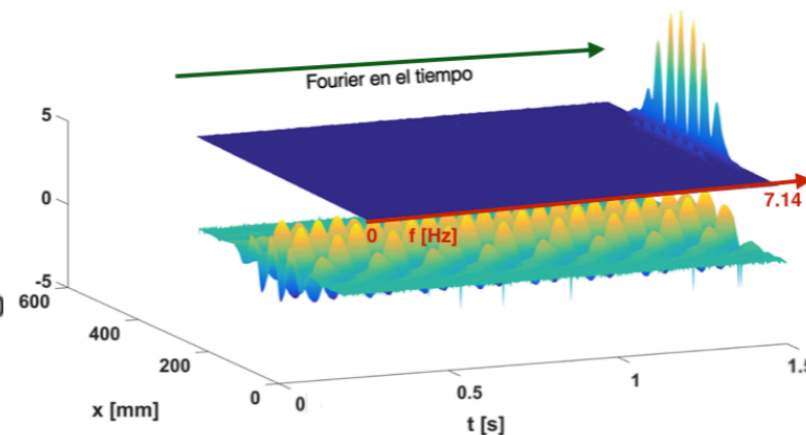
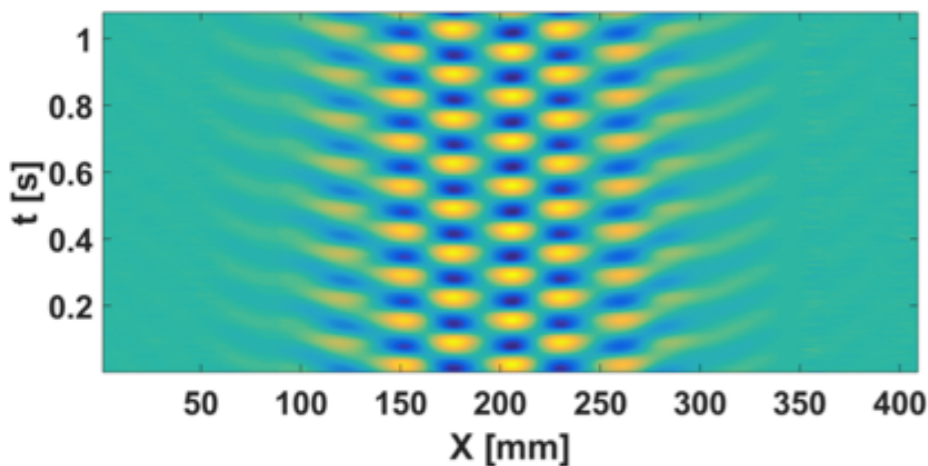
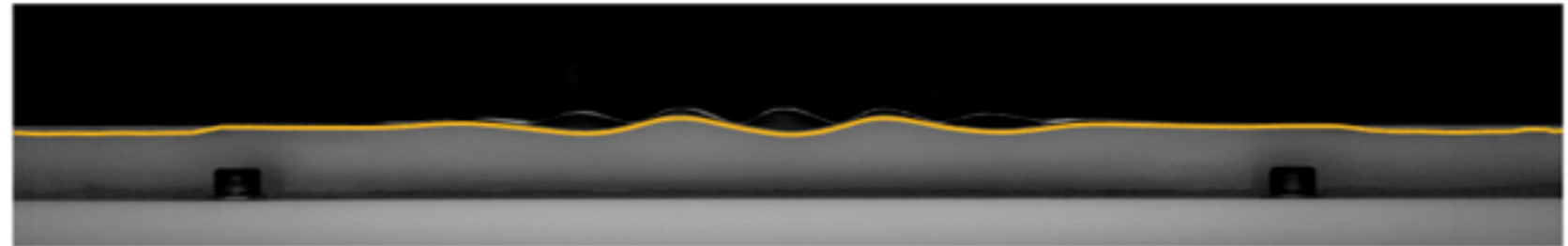
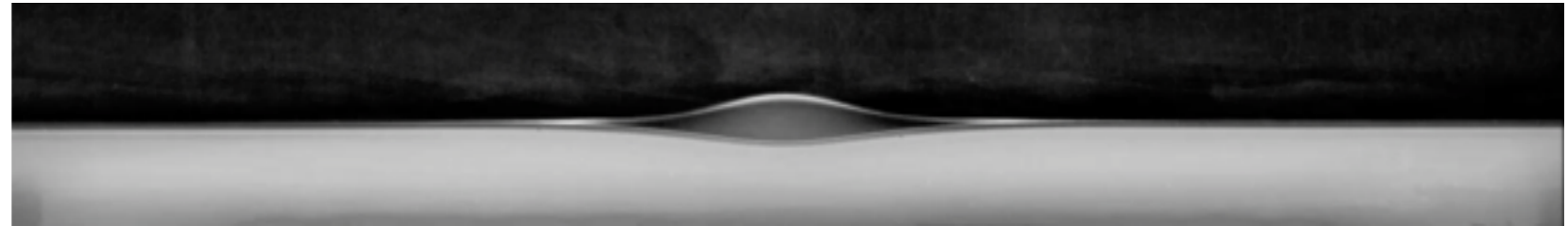
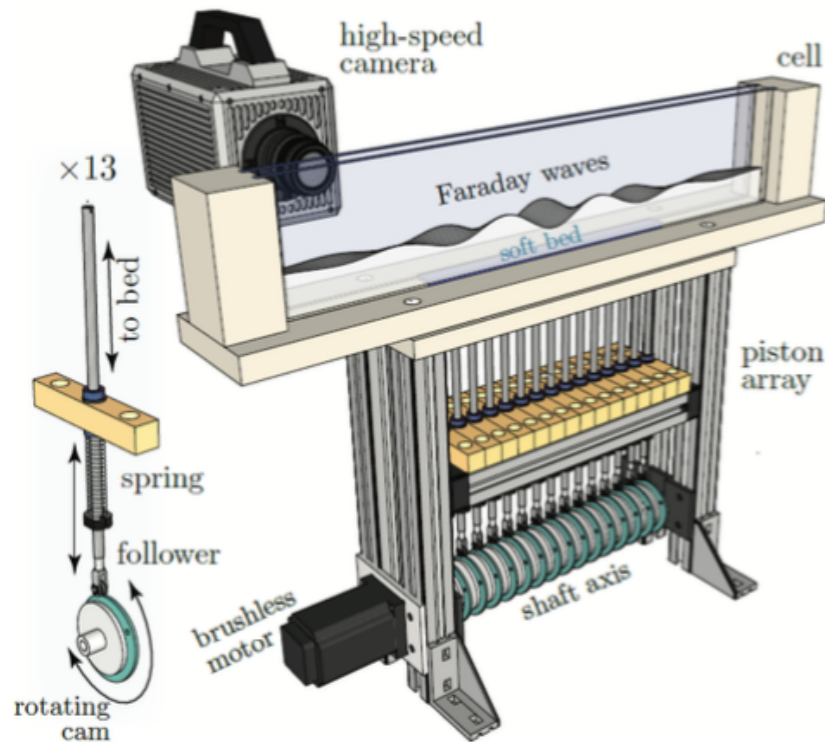
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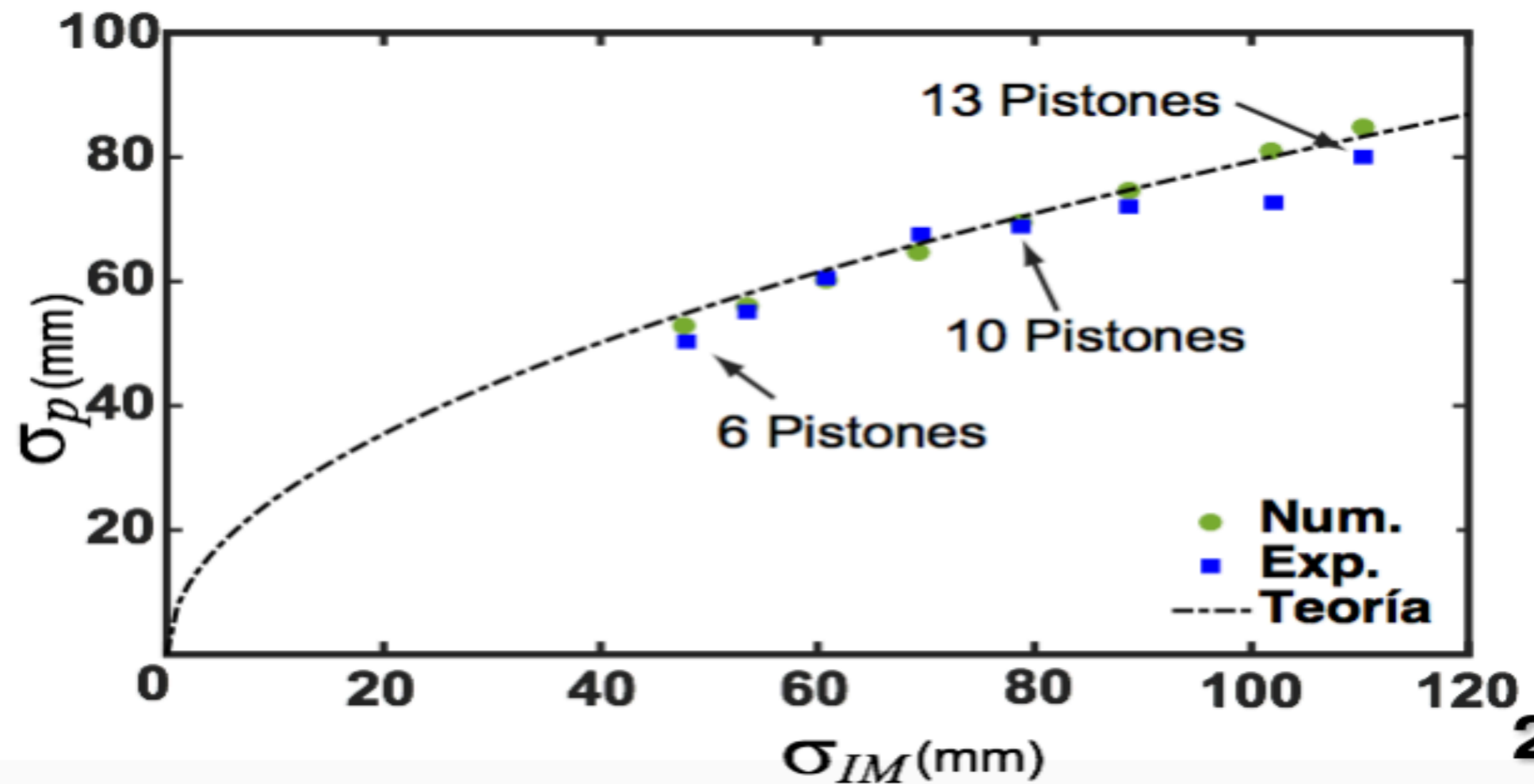
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- The normal modes that appear in the cell have a wavelength, which is found to increase as the pattern moves away from its central axis of symmetry (half the cell).
- The validity of the PDNLS equation is corroborated as a model to study the slow dynamics of a pattern in a fluid system contained in a uniform container with localized injection.
- Is demonstrated that the width or variance of the measured pattern σ_P a of the injection area measured σ_{IM} following a law of power of the form, $f(x) = ax^b$ when

$$a = 8.3 \pm 4.865 \quad [mm]^{1/2} \quad y \quad b = 0.5 \pm 0.257.$$