Optically-Induced Spatial Forcing in Rayleigh-Benard Convection

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Spatial forcing of spatially extended pattern forming systems has received little attention over the past years. Here we report experimental results on optically forced Rayleigh-Benard (isotropic system) and inclined layer convection (anisotropic system). These include a mapping of the phase space as a function of forcing periodicity and forcing strength. A comparison of the observed patterns with the predictions from Ginzburg-Landau theories is made.

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