

Global Bifurcation of Spiral and Circle Wave Solutions to the Complex Ginzburg-Landau Equation

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We use the $\mathbb{T}^2$ -equivariant degree to establish the existence of unbounded branches of stationary spiral and circle wave solutions for a complex Ginzburg Landau equation on the planar unit disc, leveraging the spatial symmetries inherent to the problem and avoiding limiting constraints encountered in previous studies relying on the classical Leray-Schauder degree.

In Special Session 49 on Bifurcations at the Mathematical Congress of the Americas 2025.