
Chimera states in systems with control

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Abstract

Chimera states are self-organized patterns of coherence and incoherence observed in systems of nonlocally coupled oscillators. In the limit of large system size their properties can be inferred from the analysis of corresponding continuum limit equation. In this talk we will show how the information provided by this analysis can be used to design new systems of coupled oscillators demonstrating new types of chimera states that are inaccessible in conventional simulations or experiments. This is joint work with M. Wolfrum and J. Sieber.

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