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### **Singularities in non-Hermitian systems at subwavelength scale and applications**

Photonic devices that exhibit both sensitivity and robustness have long been sought, yet these characteristics are thought to be mutually exclusive; through sensitivity, a sensor responds to external stimuli, whereas robustness embodies the inherent ability of a device to withstand weathering by these same stimuli. This challenge stems from the inherent contradiction between robustness and sensitivity in wave dynamics, which require the coexistence of noise-immune sensitive states and modulation-sensitive transitions between these states. Here, we report and experimentally demonstrate a subwavelength phase singularity in a chiral medium that is resilient to fabrication imperfections and disorder while remaining highly responsive to external stimuli.