REAL RIDDLED BASINS

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We report direct experimental observations of riddled basins in a system of four electronic circuits coupled diffusively in a ring configuration. The two basins involved in the riddling correspond to: (1) a synchronous chaotic state, where all oscillators execute identical chaotic motion and (2) a periodic state with a spatial pattern that matches the shortest wavelength Fourier mode supported by the system. Extreme sensitivity to initial voltages in the circuits, characteristic of basin riddling, is observed. The degree of the riddling as a function of the distance from the synchronous attractor agrees with theoretical scaling predictions for typical riddled basins.