

Painswick Surprise Major

Figure 1 displays eight 8x8 grids (labeled 1 through 8) illustrating the evolution of a 1D Ising spin chain. The vertical axis on the left of each grid is labeled with values: 1, 2, 3, 4, 5, 6, 7, 8, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80. The horizontal axis represents the spin configuration. Red lines indicate the initial state, and blue lines indicate the state after a quantum quench. The quench is marked by a horizontal line at the 12th row. The grids show the propagation of entanglement and the formation of a shock wave. The labels 1, 2, 3, 4, 5, 6, 7, 8 are placed to the right of each grid.