1011-15-159Judith J McDonald* (jmcdonald@math.wsu.edu), Mathematics Department, Box 643113,
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A nXn zero-nonzero pattern (sign pattern) is said to be spectrally arbitrary if given any self-conjugate n-tuple of numbers, there is a matrix with the given zero-nonzero (sign) pattern that achieves the n-tuple as its spectrum. I will look at some known families of spectrally arbitrary sign patterns, discuss results on zero-nonzero patterns in lower dimensions, and present some conjectures. (Received August 24, 2005)