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Andreas Blass* (ablass@umich.edu), University of Michigan, Mathematics Department, Ann Arbor, MI 48109. *Special Ultrafilters, Generic Ultrafilters, and Partitions.*

The theories of ultrafilters (non-principal, on the natural numbers) and of forcing are linked in several ways. Various notions of forcing produce ultrafilters with interesting properties. Ultrafilters also serve as constituents of other notions of forcing. And the two can be combined: First force to produce an ultrafilter and then use it for further forcing. A recurring theme in the study of such connections is the use of partition properties of ultrafilters, properties related to Ramsey's theorem and its generalizations. I plan to give a survey of these topics, beginning with the simplest sort of generic ultrafilter (with the nicest partition properties) and ending with recent results on other forms of genericity. (Received September 20, 2010)