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Getting hyper with covering arrays

Covering arrays meet graphs and hypergraphs in different ways. Covering arrays on graphs and variable-strength covering arrays use a graph (or hypergraph) with vertices corresponding to columns and edges specifying where coverage is required. Graph-dependent covering arrays use the previous column graph plus an alphabet graph with vertices corresponding to symbols and edges indicating which pairs of symbols need to be covered at all. Covering arrays avoiding forbidden edges (CAFEs) make us hyperactive with graphs dictating forbidden combinations of symbols in specific pairs of columns. We survey various joint works with Danziger, Maltais, Meagher, Mendelsohn, Newman, Raaphorst, Stevens and Zekaoui.