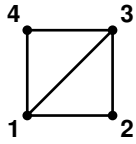
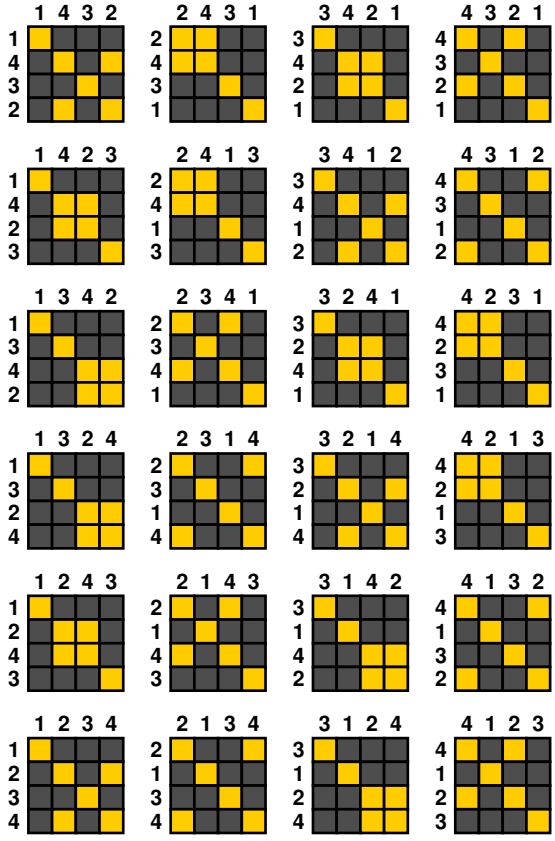
About the Cover

Twenty-four Views of 

This month's cover is explained by the essay in this issue on graphons, by Daniel Glasscock. It offers several ways to visualize the graph that would normally be pictured as



The theory of graphons sees it differently, however, as Glasscock explains. One chooses a labeling of the nodes of the graph, then lays out a square of pixels marking the edges (i, j) of the graph. The graphon, however, is the equivalence class of all such pixel maps obtained by varying the labeling. The cover can be enhanced to illustrate better what is going on:



One point is that the essential properties of a graph do not generally depend on how its nodes are labeled. For example, if the difference between two graphs is to be measured, one must be prepared to compare nodes and edges using all possible labeling. But of course as the size of a graph grows, the size of the graphon grows alarmingly large. It is almost miraculous that graphons can nonetheless be manipulated and analyzed.

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