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Covers of Graphs from Extensions of Groups

For each n-cube, there is a graph on twice as many vertices which covers (in a mildly technical sense which we will discuss) the n-cube but contains no 4-cycles. There is a lot to say about these graphs: They originated in a uniqueness proof for certain generalized hexagons. They appear implicitly in Haung's resolution of the Sensitivity Conjecture. And they demonstrate a nice correspondence between covers of Cayley graphs and extensions of groups which I have had some success in exploring. I will discuss these graphs and these contexts.