The Amazing Smith Normal Form

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Abstract: To any integer matrix there corresponds a unique diagonal matrix called its Smith normal form. The construction is a truly beautiful one, yet still the Smith normal form is often neglected by researchers in combinatorics who could be making use of this tool.

This talk will be a crash course in uses of the Smith normal form across combinatorics and algebra, including a geometric interpretation of the fundamental theorem of finite abelian groups that all math majors encounter in Abstract Algebra.

Monday, September 24 at 3:45 in Roop 103
refreshments at 3:30