



# YMC 2006



## Young Mathematicians Conference 2006

*August 4<sup>th</sup>-6<sup>th</sup> at The Ohio State University.*

WHAT GRAPHS ARE REALIZABLE AS ZERO DIVISOR GRAPHS?

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**Abstract of Report Talk:** In my talk, I will discuss what general graphs are realizable as the zero divisor graph (as described in Beck, I., Coloring of commutative rings, *J. Algebra* **116** (1988), 208-226., with a slight modification) for some finite commutative ring with identity. In the process I will provide several characterizations of when the set of zero divisors form an ideal, using both algebraic and graph theoretic properties, expanding to infinite rings when possible.

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