

Recent developments in graph and arithmetic regularity

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Since Szemerédi's seminal work in the 70s, regularity lemmas have proven to be of fundamental importance in many areas of discrete mathematics. This talk will survey some of the classical results in both the graph and the arithmetic context, examine the connections between the two settings, and describe a flurry of recent work on regularity decompositions under additional assumptions such as stability and bounded VC-dimension.