

# **Expanders: Constructions and Applications**

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## **Abstract**

Expanders are sparse graphs with strong connectivity properties, which makes these graphs extremely useful. Though showing existence of such graphs is relatively easy, explicit construction turns out to be very difficult. Not many methods are available for explicit constructions of expanders. In these survey talks, I will try to give a detailed outline of two of them. I will also talk about some applications of expanders in geometry and group theory.