

The Second Coming of the Kraken

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Abstract

In this talk we will see how a couple of krakens can be very useful to embed a *pillar* in a graph with large minimum degree (solving a conjecture of Thomassen, 1989). A pillar is a graph that consists of two vertex-disjoint cycles of the same length, s say, along with s vertex-disjoint paths of the same length which connect matching vertices in order around the cycles. Despite the simplicity of the structure of pillars and various developments of powerful embedding methods for paths and cycles in the past three decades, this innocent looking conjecture has seen no progress to date. In this talk, we will try to give an idea of the proof of such embedding, which consists of building a pillar (algorithmically) in sublinear expanders. This is joint work with Hong Liu.

Time: 12 p.m, 9th March 2022

Location: B3.02

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