

## ***Balanced subdivisions of a large clique in graphs with high average degree***

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**Zoom meeting ID: 874 4906 5937 Password: 121323**

**Link: <https://zoom.com.cn/j/87449065937>**

**Abstract:** In 1984, Thomassen conjectured that for every constant  $k \in \mathbb{N}$ , there exists  $d$  such that every graph with average degree at least  $d$  contains a subdivision of a complete graph on  $k$  vertices in which each edge is subdivided the same number of times. Recently, Liu and Montgomery confirmed Thomassen's conjecture. In this talk, we show that for sufficiently large  $d$ , every  $n$ -vertex graph with average degree at least  $d$  contains a subdivision of a complete graph of size at least  $\Omega(d^{1/2}/\log^{10} n)$  in which each edge is subdivided the same number of times.