

# SCMS Conference

## RELAXATIONS OF HADWIGER'S CONJECTURE

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**Time:** 14:00-15:00, Friday, Jan. 18, 2019

**Venue:** Room 106, SCMS, Jiangwan Campus

**Abstract:** Hadwiger's conjecture from 1943 states that every simple graph with no  $K_t$  minor can be properly colored using  $t-1$  colors. This is a far-reaching strengthening of the four-color theorem and appears to be currently out of reach in its full generality. In the last three years, however, several relaxations have been proven. In these relaxations one considers colorings such that every color class induces a subgraph with bounded maximum degree or with bounded component size. We will survey recent results on such improper colorings of minor-closed classes of graphs. Based on joint work with Zdenek Dvorak and with Alex Scott, Paul Seymour and David Wood.