

## Coloring Graphs with Forbidden Minors

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**Time: May 6th, 14:00 - 15:00**

**Zoom meeting ID: 861 3277 6675 Password: 121323**

**Link: [https://zoom.com.cn/j/861 3277 6675](https://zoom.com.cn/j/86132776675)**

**Venue: Room 102, Shanghai Center for Mathematical Sciences**

### Abstract:

Hadwiger's Conjecture from 1943 states that every graph with no  $K_t$  minor is  $(t - 1)$ -colorable; it remains wide open for all  $t \geq 7$ . For positive integers  $t$  and  $s$ , let  $\mathcal{K}_t^{-s}$  denote the family of graphs obtained from  $K_t$  by removing  $s$  edges. We say that a graph  $G$  has no  $\mathcal{K}_t^{-s}$  minor if it has no  $H$  minor for every  $H \in \mathcal{K}_t^{-s}$ . Jakobsen in 1971 proved that every graph with no  $\mathcal{K}_7^{-2}$  minor is 6-colorable. In this talk, we present our results that every graph with no  $\mathcal{K}_8^{-4}$  minor is 7-colorable, and every graph with no  $\mathcal{K}_9^{-6}$  minor is 8-colorable. This is joint work with Michael Lafferty.