

1161-05-16

**Sergey Norin** ([sergey.norin@mcgill.ca](mailto:sergey.norin@mcgill.ca)), **Luke Postle** ([lpostle@uwaterloo.ca](mailto:lpostle@uwaterloo.ca)) and **Zi-Xia Song\*** ([zixia.song@ucf.edu](mailto:zixia.song@ucf.edu)), Department of Mathematics, University of Central Florida, Orlando, FL 32816. *Breaking the degeneracy barrier for coloring graphs with no  $K_t$  minor.*

In 1943, Hadwiger conjectured that every graph with no  $K_t$  minor is  $(t - 1)$ -colorable for every  $t \geq 1$ . In the 1980s, Kostochka and Thomason independently proved that every graph with no  $K_t$  minor has average degree  $O(t\sqrt{\log t})$  and hence is  $O(t\sqrt{\log t})$ -colorable. In this talk we present our recent breakthrough on making the first improvement on the order of magnitude of the Kostochka-Thomason bound: we show that every graph with no  $K_t$  minor is  $O(t(\log t)^\beta)$ -colorable for every  $\beta > 1/4$ . (Received July 20, 2020)