

**Meeting:** 1004, Bowling Green, Kentucky, SS 2A, Special Session on Graph Theory

1004-05-224      **Xingxing Yu\*** (yu@math.gatech.edu), School of Mathematics Georgia Institute of Technology, Atlanta, GA 30332, and **Florian Zickfeld**. *On Hajos' coloring conjecture*. Preliminary report.

One of the remaining two cases of Hajos' coloring conjecture states that every graph containing no subdivision of  $K_5$  is 4-colorable. We combine structural and coloring arguments to reduce this case to 4-connected graphs. (If it can be reduced to 5-connected graphs, then it would be a consequence of a conjecture of Seymour.) (Received January 25, 2005)