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Christopher A. Francisco* (chrisf@math.missouri.edu), Department of Mathematics,
University of Missouri, 202 Mathematical Sciences Building, Columbia, MO 65211, and **Huy Tài**
Hà and **Adam Van Tuyl**. *Sequential Cohen-Macaulayness of edge ideals*. Preliminary report.

Let G be a simple graph on vertices x_1, \dots, x_n , and let $I(G)$ be the edge ideal of G in $R = k[x_1, \dots, x_n]$. We use Alexander duality to investigate conditions on G that imply that $R/I(G)$ is (or is not) sequentially Cohen-Macaulay. This is a survey of joint projects with Huy Tài Hà and with Adam Van Tuyl. (Received January 10, 2006)