

1116-VF-1705 **Axel Brandt*** (axel.brandt@ucdenver.edu), **Bernard Lidický** (lidicky@iastate.edu) and
Florian Pfender (florian.pfender@ucdenver.edu). *Short Induced Cycles in Graphs*.

In 1975, Pippinger and Golumbic conjectured that the maximum induced density of a k -cycle in graphs is $k!/(k^k - k)$ when $k \geq 5$. Recently, Balogh, Hu, Lidický, and Pfender solve this conjecture for $k = 5$. In this talk, we investigate larger k using flag algebra computations and stability methods. (Received September 21, 2015)