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**Laszlo A. Szekely\*** ([szekely@math.sc.edu](mailto:szekely@math.sc.edu)), Department of Mathematics, University of South Carolina, Columbia, SC 29208. *Biplanar and  $k$ -planar crossing numbers*. Preliminary report.

I'll discuss the following relaxation of the concept of the ordinary crossing number: partition the edge set of the graph into  $k$  graphs, so that the sum of the ordinary crossing numbers of the  $k$  graphs is minimized. The minimum sum is the  $k$ -planar crossing number of the graph, and the  $k = 2$  case is called the biplanar crossing number of the graph. I'll discuss some old and new results on how the  $k$ -planar crossing number is related to the ordinary crossing number. The old work is with Czabarka, Shahrokhi, Sýkora and Vrt'ó, while the new work is with Pach, Géza Tóth and Csaba Tóth. (Received November 17, 2014)