1135-05-2625 Bernardo M. Abrego* (bernardo.abrego@csun.edu), Department of Mathematics, California State University, Northridge, 18111 Nordhoff Street, Northridge, CA 91330-8313, and Silvia Fernandez (silvia.fernandez@csun.edu), Department of Mathematics, California State University, Northridge, 18111 Nordhoff Street, Northridge, CA 91330-8313. On the rectilinear local crossing number of complete graphs.

The local crossing number of a drawing of a graph is the largest number of crossings in any edge of the drawing. In a rectilinear drawing of a graph, the vertices are points in the plane in general position and the edges are drawn as line segments. The rectilinear local crossing number of a graph G, denoted $\overline{\text{lcr}}(G)$, is the minimum local crossing number over all rectilinear drawings of G.

In this talk, we present recent results when G is a complete graph or a bipartite complete graph. In particular, the parameter $\overline{\text{lcr}}(G)$ is completely determined for all complete graphs and for all complete bipartite graphs with one class having at most 4 vertices.

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