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Joshua Fallon* (jfall03@lsu.edu), jfall03@lsu.edu, and **Kirsten Hogenson, Lauren Keough, Mario Lomeli, Marcus Schaefer** and **Pablo Soberon Bravo**. *On The Maximum Rectilinear Crossing Number of Subdivided Stars*.

Given a graph G , its maximum rectilinear crossing number $\overline{\text{mcr}}(G)$ is the maximum number of edge crossings that can appear in a drawing of G in the plane with each edge a line segment. It is trivially bounded above by the graph's thrackle bound, which is the number of non-consecutive edge pairs. For a caterpillar T , $\overline{\text{mcr}}(T)$ and the thrackle bound are equal. If a tree is not a caterpillar, it must contain a subgraph S isomorphic to $K_{1,3}$ with each edge subdivided once. Woodall has shown that no rectilinear drawing of S achieves the thrackle bound. We present some results on more general subdivided stars to contribute to the understanding of maximum rectilinear crossing number of trees. (Received September 22, 2017)