1041-52-271   **Csaba D. Toth*** (`cdtoth@ucalgary.ca`), University of Calgary, Department of Mathematics, 2500 University Dr., NW, Calgary, AB T2N 1N4, Canada. *Light Steiner networks for a point set.*

A Steiner network for a finite set S of points in the plane is a plane straight line graph that contains every point of S at vertices or on edges. The weight of a network is the total length of its edges. This talk surveys recent results on (1) the minimum weight of a Steiner network where the boundary of every face is a convex polygon, (2) the minimum weight of a star Steiner network compared to the minimum weight (non-Steiner) star; and (3) the minimum weight of a Steiner network of constant geometric dilation. (Received August 12, 2008)

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