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University of Wisconsin - Superior, Belknap & Catlin, POB 2000, Superior, WI 54880. *New  
Families of Isoperimetric Graphs*. Preliminary report.

We consider the vertex-isoperimetric problem on graphs (VIP). The problem is to find, for a given size, a set of vertices of that size that has minimum vertex cut, separating it from its complement. The graphs admitting a series of nested solutions are called isoperimetric. We present a short survey on known isoperimetric families and introduce several new ones. (Received August 30, 2005)