1117-34-95   **Evans M Harrell*** (`harrell@math.gatech.edu`), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332-0160, and **Anna V Maltsev** (`annavmaltsev@gmail.com`), Department of Mathematics, University of Bristol, Bristol, BS81SD, United Kingdom. *Localization and spectral problems on quantum graphs.*

It is shown that the Agmon method for establishing exponential decrease of eigensolutions (or subsolutions) can be adapted to quantum graphs. As a generic matter, the rate of decay is controlled by an Agmon metric related to the classical Liouville-Geen estimate for the line, but more rapid decay is typical, arising from the geometry of the graph. Additional theorems capture this effect with alternative Agmon metrics, one adapted to a path and the other using averaging. Time permitting, some recent work on quantum graphs with optimal convex potentials will be described. (Received January 05, 2016)