

# Quantum graphs with singular two-particle interactions

J. Bolte

Single quantum particles on graphs have proven to provide interesting models in quantum chaos, and their spectral properties have been studied in great detail. We now consider many-particle models on graphs with singular two-particle interactions that are either localised in the vertices of the graph or along the edges. These delta-type interactions are realised in terms of suitable self adjoint extensions of two-particle Laplacians. The talk is based on joint work with J. Kerner.