1167-34-278 Selim Sukhtaiev* (szs0266@auburn.edu), 238 Parker Hall, Auburn University, Auburn, AL 36849. Limits of quantum graph operators with shrinking edges.

In this talk, we will discuss the question of convergence of Schrodinger operators on metric graphs with general self-adjoint vertex conditions as lengths of some of graph's edges shrink to zero. Using a combination of functional-analytic bounds on the edges of the graph and Lagrangian geometry considerations for the vertex conditions we will establish a sufficient condition for resolvent convergence. This condition encodes an intricate balance between the topology of the graph and its vertex data. This is joint work with Y. Latushkin (Missouri) and G. Berkolaiko (TAMU) (Received March 09, 2021)