1137-35-59   **Selim Sukhtaiev*** (`sukhtaiev@rice.edu`), Rice University, Department of Mathematics, Houston, TX 77005. *A bound for the eigenvalue counting function for higher-order Krein Laplacians on arbitrary open sets.*

In this talk I will discuss a bound for the eigenvalue counting function (for strictly positive eigenvalues) for higher-order Krein Laplacians. The latter are particular self-adjoint extensions of minimally defined, positive integer powers of the Laplacian on arbitrary open, bounded sets. The bound extends to open, finite volume domains of finite width, subject to a compact Sobolev embedding property, and shows the correct high-energy power law behavior familiar from Weyl asymptotics. This talk is based on joint work with M. Ashbaugh, F. Gesztesy, A. Laptev, and M. Mitrea. (Received January 22, 2018)