Self-adjoint Sturm – Liouville operators with singular coefficients

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The talk contains some new results on the self-adjointness of semibounded Sturm–Liouville operators on the line with strongly singular coefficients and their spectra. The case of 1D-Schrödinger operators is studied in more detail.

The talk is based on joint results with A. Murach, A. Goriunov, and V. Molyboga (Institute of Mathematics of NAS of Ukraine, Kyiv, Ukraine).