Inverse spectral problems for Sturm–Liouville operators with matrix-valued potentials

The talk is based on a joint project with Ya.Mykytyuk (Lviv National University).

In this talk we consider the Sturm–Liouville operators on the interval $[0, 1]$ with matrix-valued potentials in the Sobolev space $W^{-1}_2$. We give a complete description of the set of spectral data of these operators, and suggest an algorithm reconstructing the potential from the spectral data that is based on Krein’s accelerant method.