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## **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  $W_2^{-1}$ . 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.

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