

A brief introduction to the concept of Pontrjagin and Krein spaces (Hilbert spaces with indefinite metric) will be presented, as well as the connection of the invariant subspace problem with other problems of operator theory. The main aim is to give a short proof of a slight generalization of the Pontrjagin-Krein-Langer theorem on the existence of nonnegative invariant subspaces for maximal dissipative operators.