ON OBSERVABILITY OF LINEAR EVOLUTION EQUATIONS

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Observability is an important property of a distributed parameter system: It guarantees that the initial state can be recontructed from the output. For finite-dimensional systems the Hautus-test is a well-known and easy checkable condition for observability. In this talk we discuss a generalized Hautus test for distributed parameter systems. This generalized Hautus test is actually an equivalent condition for observability of most distributed parameter systems, but by means of an example we show that the generalized Hautus test is in general not sufficient for observability.