

*A new proof of Gershgorin's theorem. Michael Schelling*

We derive a new proof for Gershgorin's theorem, based on the Schur complement, which gives an estimate for the eigenvalues of an operator matrix. This version also holds for unbounded diagonal entries and relatively-bounded off-diagonal entries. Furthermore we also improved the estimates given by the so called Cassini-ovals.

The talk is based on joint work with Anna Dall'Acqua and Delio Mugnolo.