Sturm Type Singular Comparison Theorem
for Linear Hamiltonian Systems

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We consider two linear Hamiltonian systems on an unbounded interval satisfying a standard majorant condition. We present a Sturm type comparison theorem for the numbers of focal points (generalized zero points) of matrix solutions of these systems. We utilize recent theory of principal solutions at infinity and transformation and limit results for the comparative index. We motivate and illustrate the theory on singular second order differential equations. The presented results were obtained jointly with Peter Sepitka (Masaryk University, Brno).