

A.A. El-Sabbagh, F.A. Abd El Salam & K. El Nagaar: *On the Spectrum of the Symmetric Relations for The Canonical Systems of Differential Equations in Hilbert Space*; Helsinki University of Technology, Institute of Mathematics, Research Reports A539 (2007).

Abstract: *For regular canonical system of first order differential equations, we associate symmetric linear relations. Also, we define the minimal and the maximal relations for this case and construct the generalized resolvents related to the selfadjoint extensions for these symmetric relations defined in Hilbert space H or larger than the given space H . One can construct the eigenfunction expansions for the systems we are interested in and the so-called Weyl-coefficients which are the main idea to construct the spectrum of the symmetric relations. We may illustrate this case by giving some examples.*

AMS subject classifications: 47A20

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