CHANGE OF THE *CONGRUENCE CANONICAL FORM OF 2-BY-2 MATRICES UNDER PERTURBATIONS∗

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Abstract. It is constructed the Hasse diagram for the closure ordering on the sets of *congruence classes of 2 x 2 matrices. In other words, it is constructed the directed graph whose vertices are 2 x 2 canonical complex matrices for *congruence and there is a directed path from A to B if and only if A can be transformed by an arbitrarily small perturbation to a matrix that is *congruent to B.

Key words. Closure graph, *Congruence canonical form, Perturbations.

AMS subject classifications. 15A21, 15A63, 47A07.

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