## ABSTRACT VOLTERRA RELATION

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ABSTRACT. The abstract Volterra relation is the relation  $VD(S) \subseteq D(S)$ ,  $SV-VS \subseteq V^2$ , satisfied by a closed operator S and a bounded operator V over some complex Banach space X. Results of several articles of the second author are extended from the case of S bounded to the general case. These include results on similarity, quasi-affinity,  $C^n$ -classification, and growth of related semigroups.

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