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## NEW GRÜSS TYPE INEQUALITIES FOR RIEMANN–STIELTJES INTEGRAL WITH MONOTONIC INTEGRATORS AND APPLICATIONS

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*Dedicated to Professor Tsuyoshi Ando with affection*

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**ABSTRACT.** In this paper several new inequalities of Grüss' type for Riemann–Stieltjes integral with monotonic nondecreasing integrators under various assumptions for integrands are proved. Applications for functions of selfadjoint operators on complex Hilbert spaces are provided as well.

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