

A NOTE ON WIRTINGER-BEESACK'S INTEGRAL INEQUALITIES

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Abstract. In this note we show that Wirtinger's integral inequalities and Beesack's integral inequality follow from a unified integral inequality. We also consider Banach space valued versions of these inequalities.

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REFERENCES

- [1] J. B. DIAZ AND F. T. METCALF, *Variations of Wirtinger's inequality*, 1967 Inequalities (Proc. Sympos. Wright-Patterson Air Force Base, Ohio, 1965), 79–103, Academic Press, New York.
- [2] B. FLORKIEWICZ AND K. WOJTECZEK, On some further Wirtinger-Beesack integral inequalities, Demonstratio Math. 32 (1999), 495–502.
- [3] K. OZEKI AND N. OZEKI, Invitation to Inequalities, Kindai Kagakusya, 1987 (Japanese).

