

POPOVICIU TYPE INEQUALITIES FOR HIGHER ORDER CONVEX FUNCTIONS VIA LIDSTONE INTERPOLATION

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Abstract. We use Lidstone's interpolating polynomials to obtain Popoviciu-type inequalities containing sums $\sum_{i=1}^m p_i f(x_i)$, where f is an n -convex function with even n .

We also give integral analogues of the results, some related inequalities for n -convex functions at a point and bounds for integral remainders of identities associated with the obtained inequalities.

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