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Multidimensional analogues of the Markov and Bernstein inequalities. (English. Russian original) [Zbl 1026.41011](#)

Izv. Math. 65, No. 6, 1197-1241 (2001); translation from *Izv. Ross. Akad. Nauk, Ser. Mat.* 65, No. 6, 129-172 (2001).

The author establishes analogues of Bernstein's and Markov's inequalities for the case of multivariate functions. He obtains estimates for the derivatives of algebraic polynomials on convex bodies and centrally symmetric convex bodies.

Reviewer: [Dan Bărbosu \(Baia Mare\)](#)

MSC:

[41A17](#) Inequalities in approximation (Bernstein, Jackson, Nikol'skiĭ-type inequalities)

[41A63](#) Multidimensional problems (should also be assigned at least one other classification number from Section 41-XX)

Keywords:

[Bernstein inequality](#); [Markov inequality](#); [convex bodies](#)

Full Text: [DOI](#)