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UNIFORM APPROXIMATION OF CURVATURE
OF SMOOTH PLANAR CURVES¹

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We estimate the error of curvature approximation for graphs of functions from the class W^r for $r \geq 3$ in the uniform metric.

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REFERENCES

1. Subbotin Yu.N. Curvature approximation for smooth classes of plane curves by elements of finite-dimensional subspaces. *Izv. Tul'sk. Gos. Univ. Ser. Estestv. Nauki.*, 2012, no. 3, pp. 41–47 (in Russian).
2. Korneichuk N.P. *Tochnye konstanty v teorii priblizheniya* (Exact constants in approximation theory). Cambridge: Cambridge University Press, 1991, Ser. Encyclopedia of Mathematics and its Applications, 38, 452 p.
3. Achieser N.I. *Theory of approximation*, Reprint of the 1956, New York: Dover Publ., Inc., 1992, 307 p.

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