

MULTIVARIATE BERNSTEIN QUASI-INTERPOLANTS ON A TRIANGLE AND SOME APPLICATIONS

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The aim of this talk is to provide some results on multivariate Bernstein quasi-interpolants of different types applied to functions defined on a triangle and to give some applications. Classical multivariate Bernstein operators [4] and their extensions [3, 7] have been studied for about 25 years by various authors. Based on their representation as differential operators, we extend the results of [5, 6] to the multivariate case and we define new families of Bernstein quasi-interpolants. Then we compare their approximation properties on various types of functions. Our approach is distinct from another interesting extension given by Jetter and his coworkers [1, 2].

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