

CARPATHIAN J. MATH.
20 (2004), No. 1, 141 - 148

Cubature formulas of high degree of exactness

IOANA TAȘCU

ABSTRACT. In this paper we use the multivariate interpolation for construction of cubature formulas of high degree of exactness, when the domain of interpolation is a rectangle. These formulas are of Gauss-Christoffel-Stancu type. The coordinates of the Gaussian nodes are determined by using the roots of the orthogonal polynomials of Christoffel-Szegő.

NORTH UNIVERSITY OF BAI A MARE
DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE
VICTORIEI 76, 430122 BAI A MARE, ROMÂNIA
E-mail address: itascu@yahoo.com