A METHOD TO APPROXIMATE A SPATIAL SURFACE USING A BÉZIER BI-CUBIC SURFACE

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Abstract: This paper presents the development of a method for defining the control points on the tangents (to the group of points that define the marginal curves, and to the suite of points from the inner domain limited by the 4 curves) with the forming of that Bézier bi-cubic surface, whose maximum point passes through the maximum point of the initial point set. For this, we must set the limits of on the body's surface, concave-convex shapes, limited of 4 curves, create the numeric pattern of the surface. Afterwards, approximate each elementary surface with a Bézier bi-cubic surface with the coordinates x(s,t), y(s,t), z(s,t).

Key words: curve, surface, knot, tangent, point