

Erratum

Volume 28, Number 1 (1980), in the article "On the Uniqueness of the Best Uniform Extended Totally Positive Monospline" by R. B. Barra, H. L. Loeb, and H. Werner, pp. 20-29:

The top four lines of p. 22 should have appeared as the top four lines of p. 21. For the reader's convenience, these lines are reproduced below, together with the preceding paragraph (pp. 20, 21):

MAIN RESULTS

Let $K(x, \xi)$ be a real valued kernel. For a given set of odd integers $m = \{m_1, \dots, m_t\}$, an integer $n \geq 1$ and an interval $[a, b] \subset (0, 1)$ we consider the set of all monosplines of the form:

$$M(A, x) = \int_a^b K(x, \xi) d\xi + \sum_{j=0}^{n-1} a_j K^j(x, 0) + \sum_{i=1}^t \sum_{j=0}^{m_i-1} a_{ij} K^j(x, \xi_i) \tag{1}$$

where

$$0 \leq \xi_1 < \xi_2 < \dots < \xi_t \leq d', a < b < d',$$

and

$$K^j(x, \xi_i) = \frac{\partial^j}{\partial \xi_i^j} K(x, \xi)|_{\xi = \xi_i}.$$

Further, with $N = n + \sum_{i=1}^t (m_i + 1)$, we set

$$A = (a_0, \dots, a_{n-1}, a_{1,0}, \dots, a_{t,m_t-1}, \xi_1, \dots, \xi_t) \in R^N.$$

We make the following assumptions for the remainder of the paper.

I. $K(x, \xi)$ is an Extended Totally Positive kernel of order N in both x and ξ in $(c, d) \times [0, d']$ (see [8, p. 6]), where $c < 0 < 1 < d'$.

II. $K(x, 0)$ is a constant.

Lemma 1 (pp. 21, 22), in which the transposed lines appeared, is also reproduced below:

LEMMA 1. *The components of the $N - 1$ row vector $K_x(x, \bar{\xi})_{N-1}$ form an Extended Complete Tchebycheff System in $(c, d) \times [0, d']$ of order $N - 1$ (see [8, p. 375]). We will abbreviate this by saying that $K_x(x, \xi)$ is an ECT system.*