

Stability

The size of a spline

$$p = \sum_k c_k b_k \in S_\xi^n$$

is comparable with the size of its coefficients:

$$c(n) \sup_k |c_k| \leq \sup_{x \in D_\xi^n} |p(x)| \leq \sup_k |c_k|.$$

The constant depends on the degree n . It does not depend on the knot sequence ξ if the parameter interval D_ξ^n of S_ξ^n contains for each B-spline a largest knot interval in its support.