

On 1D, 2D and 3D spline quasi-interpolation

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In this talk we want to present some of our recent results on spline spaces defined on a partition of a bounded domain $\Omega \subset \mathbf{R}^d$, $d = 1, 2, 3$.

We consider quasi-interpolating operators in spline spaces of different degree and smoothness and we propose their applications to the approximation of functions and data, the numerical integration, the solution of differential problems and integral equations.