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Smoothing Spline Via Optimal Control Under Uncertainty

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Highlights

- Theoretic spline model is formulated as a linear quadratic optimal control problem.
- The measurement data are corrupted by noise with knowledge of its distribution.
- The uncertain objective function is transformed into an equivalent deterministic one.
- Control parametrization technique is used to solve the deterministic problem.
- The solution of the approximate optimal control converges in the weak* topology.

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