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## Interpolation and Reproducing Kernels

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The contribution is dealing with an interpolative mapping studied by means of the theory of reproducing kernels, which was given by N. Aronszajn. The interpolative mapping in Hilbert space was examined for example by J. P. Aubin, P. M. Anselone and P. J. Laurent, C. de Boor and R. E. Lynch, A. Sard but not with the reproducing kernels. The idea of using the reproducing kernels was first applied by M. Atteia.

We managed to prove the existence of the unique minimal interpolation with regard to a norm or a pseudonorm in Hilbert space and to determine on what space it maps. The results of earlier works are generalized by considering even the case of an incomplete space where under certain assumptions the minimal interpolation also exists. The theory applied on examples demonstrates that the minimal interpolation generates various classes of splines.

The article with the same title is to appear in the "Numerische Mathematik".