

# New vector sequence transformations

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Many numerical methods produce sequences of vectors converging to the solution of a problem. When the convergence is slow, the sequence can be transformed into a new vector sequence which, under some assumptions, converges faster to the same limit. The construction of a sequence transformation is based on its kernel, that is the set of sequences which are transformed into a constant sequence. In this talk, new vector sequence transformations are built from kernels which extend those of the most general transformations known so far.

This is a joint work with C. Brezinski (Université des Sciences et Technologies de Lille, France).