

Approximations for Weakly Nonlinear Evolution Equations

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Abstract:

Convergence of Galerkin approximations, of finite element type and of spectral type, for a large class of weakly nonlinear parabolic and hyperbolic equations is proven.

Published in *Mathematics of Computation*, **53**(1989), 471-484.

Here is the whole [article](#) in the PDF format.

[Here is a simplified summary](#) of results of my work in this area.

Some of my other publications in this area:

1. Galerkin approximations for singular linear elliptic and semilinear parabolic problems, *Appl. Anal.* **40**(1991), 41-52. This is a joint work with S.-N. Chow and D. R. Dunninger
2. [Galerkin approximations for weakly nonlinear second order evolution equations](#), *Funkcialaj Ekvacioj*, **33**(1990), 291-305.