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On the reduction of a nonlinear Noetherian differential-algebraic boundary-value problem to a noncritical case. (Ukrainian. English summary) [Zbl 1449.34063](#)

Visn. Khark. Univ., Ser. Mat. Prykl. Mat. Mekh. 90, 60-72 (2019).

Summary: We construct necessary and sufficient conditions for the existence of solution and iterative scheme for the approximate solutions of nonlinear Noetherian differential-algebraic boundary value problem in critical case.

MSC:

[34B15](#) Nonlinear boundary value problems for ordinary differential equations

[34A09](#) Implicit ordinary differential equations, differential-algebraic equations

[34C20](#) Transformation and reduction of ordinary differential equations and systems, normal forms

Cited in **1** Document

Keywords:

boundary-value problems; differential-algebraic equations; noncritical case; pseudoinverse matrices

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