cases	doc_1	doc_2	decision	id

doc_1

authors	• Hiroshi Abe
title	A Stable Explicit Scheme for Solving Inhomogeneous Constant Coefficients Differential Equation using Green's Function
publication_date	2010-11-10 23:35:48+00:00
source	SupportedSources.ARXIV
journal	None
volume	
doi	
urls	• http://arxiv.org/pdf/1011.2531v1 • http://arxiv.org/abs/1011.2531v1 • http://arxiv.org/pdf/1011.2531v1
id	id9133362744751125368
abstract	A numerical explicit method to evaluates transient solutions of linear partial differential inhomogeneous equation with constant coefficients is proposed. A general form of the scheme for a specific linear inhomogeneous equation is shown. The method is applied to the wave equation and the diffuse equation and is investigated by simulating simple models. The numerical solutions of the proposed method show good agreement to the exact solutions. Comparing with explicit FDM, FDM shows the instability by the violation of CFL condition whereas the proposed method is always stable irrespective of any time step width.
versions	

doc_2

authors	• Hiroshi Abe
title	A Stable Explicit Scheme for Solving Non-Homogeneous Constant Coefficients Equation using Green's Function
publication_date	2010-11-07 00:47:11+00:00
source	SupportedSources.ARXIV
journal	None
volume	
doi	
urls	• http://arxiv.org/pdf/1011.1599v2 • http://arxiv.org/abs/1011.1599v2 • http://arxiv.org/pdf/1011.1599v2
id	id-1071988159295628073
abstract	A numerical explicit method to evaluates transient solutions of linear partial differential non-homogeneous equation with constant coefficients is proposed.
versions	

decision: NOT DUPLICATES

id: 498