## Workshop

## Frequency domain modeling of 3D wave propagation in inhomogeneous media

Shell, Philips and the TU Delft collaborate to develop an efficient parallel three-dimensional solver for the wave equation in the frequency domain. This 3D solver will provide the basis for rigorous modeling of 3D wave propagation in inhomogeneous media for geophysical and optical applications. In this workshop we present our research results.

Date: Friday, September 24, 2004

Time: 13:30-17:00

Place: EWI building, Mekelweg 4, TU Delft

## Schedule

13:30	arrival, coffee/tea	
13:55	opening	Simon de Leeuw (chairman)
14:00	Finite-difference wave equation migration	René-Edouard Plessix,
		Wim Mulder (Shell)
14:20	Finite Element Method for general three-dimensional	
	time-harmonic Electromagnetic Problems of Optics	Paul Urbach(Philips)
14:40	Iterative solvers for heterogeneous Helmholtz problems	Kees Vuik, Kees Oosterlee
15:00	Coffee/tea	
15:30	Multigrid based preconditioners for the heterogeneous	
	Helmholtz equation	Yogi Erlangga
16:00	Parallel direct solvers for the Helmholtz equation	Mari Berglund
16:30	Applications of the 3D electromagnetic model to some	
	challenging optical problems	Hannah Wei
17:00	Closing, Drinks	

For further information see:

http://ta.twi.tudelft.nl/nw/users/vuik/symposium/waves.html