Multiresolution Time-Domain using Wavelets for the Maxwell's Equations: A Survey

In recent years wavelets decompositions have been widely used in computational Maxwell's curl equations, to effectively resolve complex problems. In this paper, we review different types of wavelets that we can consider, the Cohen-Daubechies-Feauveau biorthogonal wavelets, the orthogonal Daubechies wavelets and the Deslauriers-Dubuc interpolating wavelets. We summarize the main features of these frameworks and we propose some possible future works.

Key Words.

AMS(MOS) subject classifications.