Three dimensional full-wave simulations of reflectometry in 
toroidal plasma  ERNEST VALEO, GERRIT KRAMER, RAFFI NAZIKIAN,  
PPPL, Princeton, NJ — A three-dimensional wave propagation code, developed  
specifically to simulate correlation reflectometry in large scale fusion plasmas is de- 
scribed. The code extends an algorithm previously implemented in 2D [E. J. Valeo,  
in which separate computational methods in the vacuum, underdense and reflection  
regions of the plasma are implemented in order to obtain the high computational effi- 
ciency necessary for correlation analysis. Simulations of ITER plasma are presented  
which demonstrate the efficiency of the method.