

The weak finite element formulation for Pocklington's integro-differential equation

Dragan Poljak and Vesna Roje

*Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University
of Split, Ruđera Boškovića b.b., 21000 Split, CROATIA*

SUMMARY

The weak formulation of the generalized Galerkin approach to the finite element method for integral and integro - differential operators is described. It is shown that such an approach provides advantages over the usual variational approach because it can be easily applied to integral and integro - differential equations with non - self adjoint operators. The obtained numerical results are compared with other available results.
