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Capacitively coupled dc/rf discharges driven by arbitrary linear circuits JOHN CARY, University of Colorado and Tech-X Corporation, MING-CHIEH LIN, Department of Electrical and Biomedical Engineering, Hanyang University, Seoul 133-791, South Korea, DAVID SMITHE, SEAN ZHOU, Tech-X Corporation — We have developed a method for computing the system of an arbitrary linear circuit coupled to a capacitively coupled plasma discharge. The method relies on the known method of separation of the vacuum and plasma generated fields for the discharge. It is time centered and implicit in the circuit quantities, thus guaranteeing second-order accuracy in time. This method has been implemented in the VSim engine (Vorpal). Numerical verification of the order of accuracy will be shown.

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