Abstracts

Efficient algorithm for steady-state stability analysis of large analog/RF circuits

P. Bolcato, J.C. Nallatamby, C. Rumolo, R. Larcheveque, M. Prigent and J. Obregon. "Efficient algorithm for steady-state stability analysis of large analog/RF circuits." 2001 MTT-S International Microwave Symposium Digest 01.1 (2001 Vol. I [MWSYM]): 451-454 vol.1.

This paper presents a method for the investigation of AC and large signal steady-state stability of electrical (analog/RF) circuits. In both cases stability/instability are detected through fast calculation and analysis of circuit poles. Thanks to iterative algorithms (Krylov-subspace methods) applied to modified nodal formulation of conversion matrices, a selection of poles is computed, allowing the method to be applied to large size circuits of any type of topology.

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