

# IMPEDANCE MATCHING FOR PV GENERATOR

Angel Cid-Pastor<sup>1,3</sup>, Luis Martínez-Salamero<sup>2</sup>, Corinne Alonso<sup>1</sup>, Guy Schweitz<sup>3</sup> and Ramon Leyva<sup>2</sup>

<sup>1</sup> LAAS-CNRS, Laboratoire d'Analyse et des Architectures des Systèmes, Toulouse, France

<sup>2</sup> ETSE Universitat Rovira i Virgili / Dept. Eng. Electrònica, Elèctrica i Automàtica, Tarragona, Spain

<sup>3</sup> EDF R&D / LME Department, Moret sur Loing, France

## **Abstract**

A comparative analysis between a DC power transformer and a DC power gyrator on equal bases of operation is presented. Both approaches are used to solve the problem of maximum power transference from a PV panel to a DC load. An outdoor measurements system has been implemented and comparative experiments have been carried out during six hours. Results show that both approaches are practically equivalent in terms of efficiency.