

***e-KiteLab*: RESEARCH IN APPLIED PHYSICS FOR MAINTENANCE AND OPTIMIZATION OF RENEWABLE ENERGY SYSTEMS**

Cecilia Sandoval-Ruiz

ABSTRACT

The research aims to develop a theory of applicability of the mathematical convolution operator, as a modeler of physical systems. The method includes a compatibility analysis between the mathematical model and the stages of the system, interpreting the meaning of the components and physical variables. As a result, a support matrix is obtained to address research, maintenance and optimization of systems, through a mobile laboratory of projective kite arrangements, for identification of patterns and development of technology in impact mitigation of the renewable energy parks, which allows providing a technique for dynamic configuration of model parameters.

Keywords: Energy Research, Resonant Systems, Diffraction Patterns, Geometric Symmetry, VHDL.

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