Guidelines for Student Reports

Analysis of the multi-band behaviour of a fractal monopole antenna perturbed with the Minkowski Curve

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Abstract

Fractal geometries are based on the recursive repetition of a simple geometrical shape. This process allows to obtain very complex structures with few iterations. The introduction of fractal perturbations on the geometry of a patch antenna lead to multiple frequency resonance. The aim of this project activity is to study the radiating behavior of the modeled antenna both adding and subtracting the fractal geometry to the antenna shape. A successive step may integrate an optimization tool in order to define an optimal antenna geometry which comply with a given set of frequency bands.

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