

1147-43-679

Edward Voskanian* (evosk001@ucr.edu), 7020 Estepa Drive, Tujunga, CA 91042, and **Michel L. Lapidus**. *Mathematical Diffraction by the Complex Roots of a Nonlattice Dirichlet Polynomial*. Preliminary report.

Lapidus and van Frankenhuijsen have developed a procedure to approximate the set of complex roots of a nonlattice Dirichlet polynomial. This method of approximation shows that the set of complex roots of a nonlattice Dirichlet polynomial are almost periodically distributed like that of a lattice Dirichlet polynomial. I will give some results, in the context of mathematical diffraction, concerning a question stated by Lapidus and van Frankenhuijsen as to whether or not there is any connection between the quasiperiodic structure in the nonlattice case and the theory of mathematical quasicrystals. (Received January 28, 2019)