

1098-37-245

Michael Baake* (mbaake@math.uni-bielefeld.de), Dept. of Mathematics, Bielefeld University, Bielefeld, Germany, and **Franz Gaehler** (gaehler@math.uni-bielefeld.de). *An exact renormalisation approach to primitive substitution rules.* Preliminary report.

The classic Fibonacci substitution is revisited from the point of view of constructing its autocorrelation via the solution of an exact renormalisation equation. This leads to an independent interpretation of pure point diffraction and dynamical spectrum. We discuss first steps how to extend this approach to more general substitution rules. (Received January 27, 2014)