

# ABSENCE OF ABSOLUTELY CONTINUOUS DIFFRACTION SPECTRUM IN INFLATION TILINGS

F. Gähler, *Univ. Bielefeld, Germany*

The diffraction spectrum of an inflation tiling is given by the Fourier transform of its pair correlations, for which exact renormalisation equations have been developed recently. After reviewing these, we concentrate on the absolutely continuous (ac) part of the spectrum, which must satisfy the renormalisation equations separately. This allows to derive necessary conditions for the existence of ac spectrum, and in fact to rule it out in many cases. We illustrate these techniques with a number of examples in one and two dimensions, where such a result was not previously known..