



THE RANDOM DISPLACEMENT MODEL. (SCIENTIFIC TALK)

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The Anderson model describes disordered materials such as alloys by considering the nuclear charges as random variables. On the other hand, materials with structural disorder may be described by the random displacement model. The latter is mathematically less well understood due to the lack of monotonicity properties present in the Anderson model. We will discuss low energy properties of the random displacement model and, in particular, a connection with a problem from spectral geometry and unusual consequences for the integrated density of states.