



Mathematical Physics

A comment on the relation between diffraction and entropy

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Diffraction methods are used to detect atomic order in solids. While uniquely ergodic systems with pure point diffraction have zero entropy, the relation between diffraction and entropy is not as straightforward in general. In particular, there exist families of homometric systems, which are systems sharing the same diffraction, with varying entropy. We summarise the present state of understanding by several characteristic examples.

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