

Interplay between diagonal and off-diagonal disorder in a hard-core boson system: A mean-field approach

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We study the interplay between diagonal and site-dependent Mattis-type off-diagonal disorder in a hard-core boson system within the mean-field approach. The ground state phase diagrams are presented. We analyze effects of various types of diagonal disorder. We have found differences with respect to the previously reported results. We comment on the possible existence of the bose glass phase in this system.

9.7 cm

13.4 cm

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