STUDY OF THE MOTT TRANSITION IN THE 3D HUBBARD MODEL

F. Mancini, V. Turkowski

Dipartimento di Scienze Fisiche "E.R.Caianiello" e Unita I.N.F.M. di Salerno
Università di Salerno, 84081 Baronissi (SA), Italy,
IIASS "E.R.Caianiello", 84019 Vietri sul Mare (SA), Italy

9.7 cm

The Mott-Hubbard transition in the 3D Hubbard model is studied using the composite operator method. The critical interaction U_c, which separates paramagnetic insulating and metallic phases, has been found. In order to investigate the ground state the probability of intersite hopping is studied. It is shown that some correlation functions go to zero as the interaction reaches the critical value U_c. This fact gives reason to consider these functions as the order characteristics in the normal phase.

13.4 cm

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Corresponding author :
V. Turkowski

Address for correspondence :
Dipartimento di Scienze Fisiche "E.R.Caianiello" e Unita I.N.F.M. di Salerno
Universita di Salerno, 84081 Baronissi (SA), Italy

Email address :
turkowsky@vaxsa.csied.unisa.it