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Abstract for an Invited Paper
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Cluster Dynamical Mean Field Analysis of the Mott transition

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I will present recent results on the evolution from an anomalous metallic phase to a Mott insulator within the two dimensional Hubbard model, using a cluster extension of dynamical mean field theory. In particular, the density-driven Mott metal-insulator transition is approached in a non-uniform way in different regions of the momentum space. This gives rise to a breakup of the Fermi surface and to the formation of hot and cold regions, whose position depends on the hole or electron like nature of the carriers in the system.