Abstract for an Invited Paper
for the MAR13 Meeting of
the American Physical Society

Dynamical symmetries in ageing phenomena
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Systems undergoing physical ageing can be characterised by (i) undergoing slow relaxation (ii) absence of time-translation-invariance and (iii) dynamical scaling. Specific examples are obtained by quenching many-body systems from a high-temperature initial state to below their critical temperature. Here, we shall consider consequences of an assumed extension of dynamical scaling to a larger group of local scale-transformations. Explicit scaling forms of two-time responses and correlators are obtained. These will be compared with simulative data in simple magnets, as well as in many-body systems without an equilibrium stationary state, such as critical directed percolation or domain-growth in the Kardar-Parisi-Zhang universality class.