

**[P9] Bond-site duality in explosive percolation models on a two-dimensional lattice**

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To investigate the bond-site duality of explosive percolations in 2 dimension, the site and bond explosive percolation models are carefully defined on a square lattice. From the analysis of the cluster distribution function and the behavior of the second largest cluster, we show that the duality exists for the pairs of the site model and the corresponding bond model in the intra-bond occupation is relatively enhanced and the transition is discontinuous. In contrast the intra-bond-suppressed models which have no corresponding site models undergo the continuous transition and satisfy the normal scaling ansatz as ordinary percolation.