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Group Theory and Domain-boundary defects in crystals. KAROLYN MOCELLIN, BRANTON J CAMPBELL, Brigham Young University — The symmetries of a crystal form a space group. A phase transition gives rise to a physical order parameter that breaks some of the space-group symmetries, while preserving others. Those that are preserved form a subgroup of the original space group. The cosets of the subgroup can be used to construct a graph that illuminates the defects that arise where domains of the order parameter intersect.

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