Reconciliation of local and global symmetries for a class of crystals with defects

G.P.Parry & R.Sigrist*

Cesare Davini Symposium
Udine, February 25-26, 2011

Abstract

We consider the symmetry of discrete and continuous crystal structures which are compatible with a given choice of dislocation density tensor. By introducing the notion of a 'defective point group' (depending on the dislocation density tensor), we generalize the notion of Ericksen-Pitteri neighbourhoods to this context.

*University of Nottingham, UK. E-mail: Gareth.Parry@nottingham.ac.uk