

The best constant of discrete Sobolev inequality on C60 Fullerene

Yoshinori Kametaka
Osaka University
Japan

Abstract: The best constant of discrete Sobolev inequality on a finite graph with good symmetry is obtained. Regular polyhedra, truncated regular polyhedra are treated. The most important is the truncated icosahedron, C60 Fullerene. Triangular, square and hexagonal lattices on a torus of small size are also treated. Among these Carbon Nanotubes on a torus are also very interesting.