

Lattice approximation of a surface integral and derivation of a magnetic force formula

ANJA SCHLÖMERKEMPER

In this talk we consider certain lattice sums over points which are close to some interface. These lattice sums approximate corresponding surface integrals for small lattice spacing. I will present the main ideas of the proof which uses so-called modified unit cells. In the second part of the talk I will show how this approximation result can be applied in the context of magnetic forces.