

## **On threshold spectral properties of periodic operators**

Following Birman and Suslina, we call the spectral properties of a periodic elliptic operator that depend only upon the infinitesimal structure of its dispersion relation near a band's edge, "threshold properties." Those include, for instance, homogenization, Liouville theorems, and Green's function asymptotics. The lecture will survey the known results, as well as some open problems.