Eigenvalue asymptotics of perturbed periodic Dirac systems in the slow-decay limit

Karl Michael Schmidt
Cardiff University, Wales

A perturbation decaying to 0 at infinity and not too irregular at 0 introduces at most a discrete set of eigenvalues into the spectral gaps of a one-dimensional Dirac operator on the half-line. This talk reports on a result showing that the distribution of eigenvalues in the gap is given by a quasi-semiclassical asymptotic formula in the slow-decay limit, which for perturbations of power decay is equivalent to the large-coupling limit.