

the successive contribution to the two-particle transfer cross section is the dominant one, non-orthogonality canceling much of the already weak, simultaneous contribution. Of notice that similar issues were debated in connection with the proposal of Josephson²⁹ concerning the possibility of observing a supercurrent across a dioxide layer separating two superconductors, and Bardeen's objection that the pairing gap is zero inside the layer.³⁰ The answer to such an objection is to be found in the fact that it is $\alpha_0 (= \langle P^\dagger \rangle)$ which controls tunneling and not Δ , a fact that emerges naturally from Gorkov's formulation of superconductivity (see contribution of Potel and Broglia to the present volume).

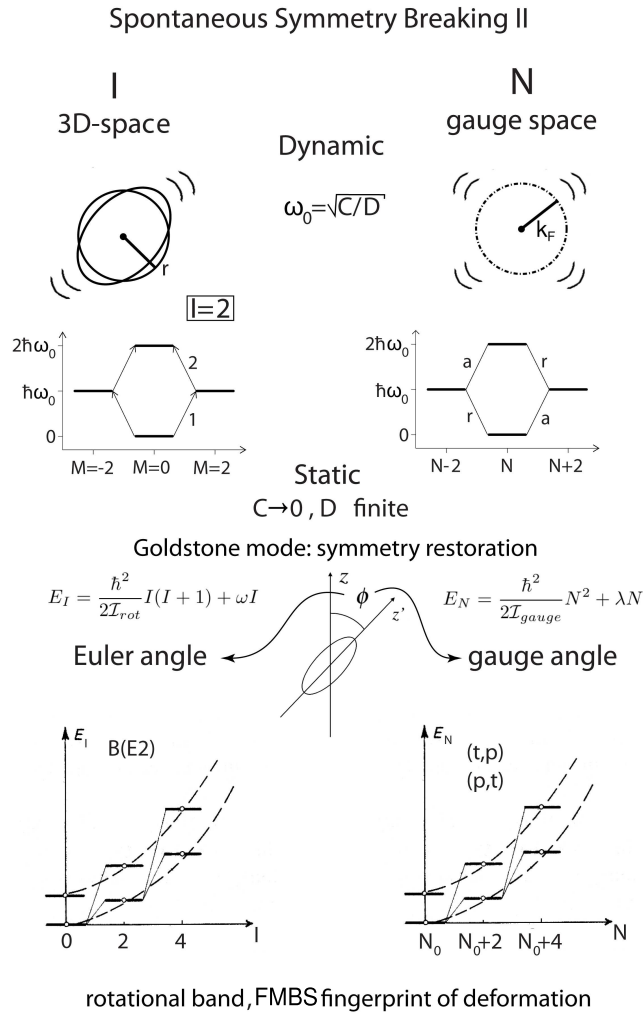


Fig. 5. Schematic representation of collective modes associated with dynamical and static distortions violating rotational and gauge symmetries (see also table XI in Ref. 35)