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Caroli-de Gennes-Matricon (CdGM) states

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The CdGM states are a series of quantized superconducting quasiparticles in a vortex of conventional superconductor, which were first proposed theoretical in 1964 by C. Caroli, P. G. de Gennes and J. Matricon^[1]. These vortex bound states avoid zero-energy, and show particle-hole asymmetric wavefunction under quantum limit.

References

1. ^C. Caroli, P.G. De Gennes, J. Matricon. (1964). Bound Fermion states on a vortex line in a type II superconductor. *Physics Letters*, vol. 9 (4), 307-309. doi:10.1016/0031-9163(64)90375-0.