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On the Aharonov-Bohm Operators

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We study the spectral and the scattering properties of the Schrödinger operators associated with the delta-type magnetic field. We describe all the self-adjoint realizations of this operator and give explicit formula for the resolvent, wave operators and the scattering matrix in terms of the boundary conditions. Based on joint works with Serge Richard (Lyon/Cambridge) and Johannes Kellendonk (Lyon).