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Polarized fermionic superfluidity in the crossover from 3D to 1D[1]
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We present results for a self-consistent bogoliubov-deGennes treatment of polarized fermionic superfluid at strong interaction in an anisotropic trap with cylindrical symmetry. Our studies track the nature of superfluidity as the radial confinement is increased and system goes from 3 to 1 dimension. We observe significant FFLO regions in both the 3d and 1d region which was previously unexpected.

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