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Spin-Wave Excitations and Superconductivity YURIY MALOZOVSKY, Southeastern Louisiana University, J.D. FAN, JD Duz (USA)-CQU Institute for Superconductivity, Chongqing University, Chongqing, China and Southern University, Baton Rouge, Louisiana, USA — We study in terms of the effective two-particles T-matrix pairing by exchanging spin-wave excitations near the ferromagnetic or antiferromagnetic instability. We show that near the ferromagnetic instability the paring due to the exchange the paramagnetic excitations can occur in the p-wave state ($\ell=1$) and $m=\pm 1$. We show that near the antiferromagnetic instability the pairing due the exchange the paramagnetic excitations occurs also in the p-wave state ($\ell=1$) but with m=0 and that there is no pairing in d-wave state.

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