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Normal State Spin Dynamics of Five-band Model for Iron-pnictides TOSHIKAZE KARIYADO, MASAO OGATA, Department of Physics, University of Tokyo and JST, TRIP — Normal state (assuming absence of SC or AF order) spin dynamics of iron-pnictide superconductors is discussed by calculating spin structure factor $S(q, \omega)$ in an itinerant five-band model within RPA approximation. Due to the characteristic Fermi surface structure of iron-pnictide, column like response is found at $(\pi, 0)$ in extended Brillouin zone. This is consistent with recent neutron experiments. Furthermore, we show that the temperature dependence of inelastic neutron scattering intensity is reproduced if we set interaction parameters appropriately.

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