Asymmetrical ferromagnet-superconductor trilayers in external magnetic field

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We study the critical temperature T_c of F_1SF_2 and F_1F_2S asymmetrical trilayers in the presence of external magnetic field H parallel to the film. In these structures the triplet superconducting component is generated at noncollinear magnetizations of the F layers. Assuming that both different F layers and S layer are dirty, we solve the boundary value problem for the Usadel function. The T_c dependence from thicknesses of the F layers (d_{f1} and d_{f2}) is numerically calculated at different values of parameters of the FS structure and external field. It is shown that the phase diagrams $T_c(d_{f1}, d_{f2})$ essentially depend from transparencies of both internal boundaries, magnitude the magnetic field and mutual orientation of magnetizations. The solitary reentrant superconductivity is predicted for both system, and a possibility of the effect observation is discussed.