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Interplay between superconductivity and ferromagnetism in tunneling¹ MARTIN GRONSLETH, JACOB LINDER, ASLE SUDBO, Norwegian University of Science and Technology (NTNU), N-7491 Trondheim, Norway. — We study tunneling currents in a model consisting of ferromagnetic spin-triplet superconductors with magnetization in an arbitrary direction separated by a thin insulating layer. A novel effect is found with both ferromagnetic and superconducting phases entering in the expressions for the single- and two-particle tunneling currents in both spin and charge sector. This interplay between ferromagnetism and superconductivity is present when unconventional Cooper pairs with parallel spin pairing are allowed to form.

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