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Domain wall motion by subcritical harmonic current YURY ADAMOV, ARTEM ABANOV, JAIRO SINOVA, Texas A&M University — We consider the behavior of the domain wall in the bianisotropic magnetic wire. We show that while the domain wall cannot be moved by the constant current below the certain threshold value (critical current), if we add an alternating component to the current the domain wall starts to move with nonzero velocity. We obtain the analytic expression for this velocity and make suggestions of possible experiments.

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