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# Kink scattering in the presence of geometric constrictions

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We investigate kink-antikink collisions in a model characterized by two scalar fields in the presence of geometric constrictions. The model includes an auxiliary function that modifies the kinematics associated with one of the two fields. An important fact is that one of the fields can be solved independently, being responsible for changing the internal structure of the second one. We performed several collisions and observed the presence of resonance windows for small values of the parameters. Furthermore, we have been able to show the alternation between the appearance of oscillating pulses, as well as the annihilation and formation of kink-antikink pairs when the geometric constriction is more pronounced. The study of kink dynamics in models with geometric constrictions is connected with issues of interest such as domain wall formation and magnetization at the manometric scale.