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GEOMETRICALLY CONSTRAINED WALLS
IN THREE DIMENSIONS

RICCARDO CRISTOFERI, GABRIELE FISSORE

Department of Mathematics - IMAPP, Radboud University, Nijmegen, The Netherlands
(E-mail: {riccardo.cristoferi,gabriele.fissore}@ru.nl)

and

MARCO MORANDOTTI

Dipartimento di Scienze Matematiche "G. L. Lagrange", Politecnico di Torino, Italy
(E-mail: marco.morandotti@polito.it)

Abstract. We study geometrically constrained magnetic walls in a three dimensional geometry where two bulks are connected by a thin neck. Without imposing any symmetry assumption on the domain, we investigate the scaling of the energy as the size of the neck vanishes. We identify five significant scaling regimes, for all of which we characterise the energy scaling and identify the asymptotic behaviour of the domain wall. Finally, we notice the emergence of sub-regimes that are not present in the previous works due to restrictive symmetry assumptions.