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Long range order in gauge theories: Deformed QCD as a toy model¹ EVAN THOMAS, University of British Columbia — I present some recent work (arXiv:1208.2030) on long range order in gauge theories, using a "deformed" QCD model. I first introduce the theory and the formulation of topological objects, mainly monopoles and domain walls. I then present our numerical calculation and results related to the interaction between a monopole and a nearby domain wall. Finally, I discuss how this can help us understand some recent lattice QCD results which indicate that topological charge in real QCD may be exclusively spread along extended objects rather than localized in point-like instantons.

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