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**The decay of MHD turbulence in a bounded domain** KAI SCHNEIDER, SALAH NEFFAA, M2P2–CNRS & CMI, Universite de Provence, Marseille, France, WOUTER BOS, LMFA - CNRS, Ecole Centrale de Lyon - Universite de Lyon, France — The effect of non periodic boundary conditions on decaying two-dimensional magnetohydrodynamic turbulence is investigated. We consider a circular domain with no-slip boundary conditions for the velocity and where the normal component of the magnetic field vanishes at the wall. Different flow regimes are obtained by starting from random initial velocity and magnetic fields with varying integral quantities. These regimes, equivalent to the ones observed by Ting, Matthaeus and Montgomery [Phys. Fluids **29**, 3261, (1986)] in periodic domains, are found to subsist in confined domains. We examine the effect of solid boundaries on the energy decay and alignment properties. The final states are characterized by functional relationships between velocity and magnetic field.

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