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Trang T Ha* (trangtha@gwu.edu), Phillips Hall, 801 22nd St NW, Room 724A, Washington, DC 20052. *Space of Orders on Computable Magmas*.

A magma is computable if it is finite, or if its domain can be identified with the set of natural numbers and the magma operation is computable. We study algebraic and topological properties of orderable magmas, and investigate the Turing complexity of orders on computable orderable magmas. We further discuss the spaces of orders on special self-distributive (and not necessarily associative) magmas that come from knot theory and are known as racks and quandles. (Received February 05, 2018)