Seminar
Group of Algebra and Geometry

How algebraic is the dual of Priestley?
(parte II)

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`https://videoconf-colibri.zoom.us/j/83717586215`

Since Bill Lawvere's rather surprising presentation of metric spaces as enriched categories – or, more modestly, as enriched (or "fuzzy") ordered sets, several attempts have been made to investigate metric spaces from this point of view. In this talk we report on our ongoing work in this direction, in particular, we discuss metric variants of lattices and Boolean algebras together with their duality theory. This naturally forces us to study metric compact Hausdorff spaces (a metric version of Nachbin's ordered compact Hausdorff spaces), and in particular a special class of those spaces: Priestley spaces. Motivated by classic results about compact Hausdorff spaces and more recent results about partially ordered compact spaces, in this talk we investigate the algebraic character of the dual of the category of metric (and, more general, quantale enriched) Priestley spaces and morphisms.