

**Seminar in Logic, Set Theory and Topology  
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" Quasi-order-minimality:  
a uniform approach to o-minimality,  
C-minimality, p-minimality and variants thereof. "**

**Abstract:**

In the note "Quasi-Ordered Fields" by S. M. Fakhruddin [JPAA 45 (1987) 207-210] the author introduces the notion of a quasi-ordered (q.o.) field and shows the following dichotomy: a q.o. field is either an ordered field or a Krull valued field. We take this approach further to exhibit a theory of q.o. convex valuations. Classical results on (order) convex valuations can be reformulated for q.o. convex valuations in a natural way. In particular, this provides an elegant and uniform treatment of lifting of orderings, coarsening and composition of valuations. In this talk, I will explain the above, focusing on a new concept of "q.o.-minimality" generalizing several existing minimality notions.