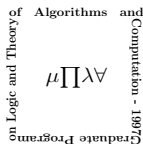


# o-Minimality and its Variations

Vagios Vlachos



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## Assumptions

- $\mathcal{M} = (M, <, \dots)$
- $<$  is dense, linear, without endpoints.
- definability with parameters

## Definition

The structure  $\mathcal{M}$  is called *o-minimal* if every definable subset of  $M$  is a finite union of singletons and open intervals with endpoints in  $M_\infty := M \cup \{-\infty, +\infty\}$ .