VIKTOR VERBOVSKIY. On sets and functions definable in ordered Abelian groups. Kazakh British Technical University. E-mail: viktor.verbovskiy@gmail.com.

During the last decade Model theory of ordered Abelian groups is developed mainly in two classes of theories: dp-minimal and o-stable. In my talk I review some history of model theory of ordered Abelian groups and focus on subsets and functions which are definable in dp-minimal and o-stable ordered groups. In particular, for a dp-minimal ordered group $G$ with finitely many definable convex subgroups it holds that any definable subset is a Boolean combination of convex sets and cosets of $nG$, and any definable function is locally monotone (the joint result with J. Goodrick). Also I discuss properties of subsets and functions definable in o-stable ordered groups, and give similarity and difference of properties of definable subsets in dp-minimal and o-stable ordered groups.