Title: Expansions of the real line having o-minimal open cores.

Abstract: The open core of a structure $\mathcal{R} := (\mathbf{R}, <, \ldots)$ is defined to be the reduct (in the sense of definability) of $\mathcal{R}$ generated by all of its definable open sets. If the open core of $\mathcal{R}$ is o-minimal, then the definable sets are well behaved in a certain sense, even if $\mathcal{R}$ is not o-minimal. We show that if every definable subset of $\mathbf{R}$ is finite or uncountable, or if $\mathcal{R}$ is an expansion of the real field and every definable open subset of $\mathbf{R}$ has finitely many connected components, then the open core of $\mathcal{R}$ is o-minimal. (Joint work with P. Speissegger.)