Title: Intersections of O-minimal Theories.

We consider various variants and issues related to the following problem: Let $\mathcal{F}$ be a family of unary functions from $\mathbb{R}$ to $\mathbb{R}$ so that for each $f \in \mathcal{F}$ the structure $\mathcal{R}_f = \langle \mathbb{R}, +, \cdot, <, f \rangle$ is o-minimal (for example $\mathcal{F}$ could be all restricted analytic functions). Let $T_f = Th(\mathcal{R}_f)$ and let $T_{\mathcal{F}} = \cap_{f \in \mathcal{F}} T_f$ and supposes that $\mathcal{R} = \langle \mathbb{R}, +, \cdot, <, g \rangle \models T_{\mathcal{F}}$. We ask about the properties of $\mathcal{R}$ (e.g. is it o-minimal?) and the properties of g (e.g. is $g \in \mathcal{F}$?).