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Sylvia Carlisle* (carlisle@rose-hulman.edu). *Types in the theory of \mathbb{R} -trees*. Preliminary report.

An \mathbb{R} -tree is metric space such that between any two points there is a unique geodesic segment. An \mathbb{R} -tree is *richly branching* if the set of points with at least 3 branches of a given length is dense. We study \mathbb{R} -trees as metric structures using an appropriate continuous signature. The theory $\text{rb}\mathbb{R}\text{T}$ of richly branching \mathbb{R} -trees is the model companion to the theory of \mathbb{R} -trees; it is complete, has quantifier elimination, and is stable but not superstable. Here, we discuss types and type spaces for $\text{rb}\mathbb{R}\text{T}$. We describe the independence relation, canonical bases and principal types of finite tuples. We consider the d -metric on types and show that the space of 2-types over the empty set is nonseparable. (Received August 10, 2015)