1172-37-52Peter R Massopust* (massopust@ma.tum.de), Centre of Mathematics, Boltzmannstrasse 3,
85748 Garching by Munich, Germany. Attractors of Trees of Maps, Sequences of Maps between
Spaces with Applications to Fractal Interpolation.

We consider a countable sequence of metric spaces $\{(X_i, d_i)\}$ and an associated countable sequence of maps $\{T_i\}, T_i : X_i \to X_{i-1}$ and derive conditions for the convergence of backward trajectories of the $\{T_i\}$ to a unique attractor. An example of such trees of maps are trees of function systems leading to the construction of scale dependent and location dependent fractals. As an application, we introduce the new concept of non-stationary iterated function systems and their attractors. (Received August 13, 2021)