In his 2011-paper in Advances of Mathematics, Leinster introduced equational systems as an algebraic way to describe the topology of a self-similar fractal. This approach applies to IFS-fractals satisfying the open set condition, but also fractafolds and some Julia sets are included. However, the fractals are considered as objects on their own, without the embedding into Euclidean space. Also, the metric is not part of the data.

In this talk I will give an overview of Leinster’s approach and introduce some ways of adding a metric to fractals defined in this way. This is joint work with James Eckstein and Robert Dawson.