Ana Reguera: How to obtain finiteness properties in the infinite dimensional scheme of the space of arcs.

The space of arcs X_∞ of a variety X over a perfect field k is a k-scheme which is not of finite type. However, when we localize at the stable points P of X_∞, we obtain finiteness properties. Two of them are:
  * The dimension of the local ring of X_∞ at P is finite.
  * Its completion is a Noetherian ring.
  In the talk I will focuss on these properties, I will report on what is known about the dimension of the local ring and also on how to describe the completion.