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Inseparable local uniformization

It is known since the works of Zariski in early 40ies that desingularization of varieties along valuations (also called local uniformization) can be considered as the local part of the desingularization problem. It is still an open problem in positive characteristic if local uniformization exists, but local uniformization is always possible after a purely inseparable alteration. In this lecture I will explain some ideas about proving the latter result and provide a link to Berkovich analytic geometry.