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Francois Loeser* (loeser@math.jussieu.fr), University Pierre et Marie Curie, 75005 Paris, France. *Non-archimedean geometry and the incidence complex of singularities.*

Let X be an algebraic variety over a perfect field k and x an isolated singular point. Using Berkovich non-archimedean geometry over the field k endowed with the trivial norm, Amaury Thuillier proved in *Manuscripta Math.* 123 (2007), 381–451, that the homotopy type of the incidence complex of the exceptional divisor of a resolution of singularities at x does not depend on the resolution chosen. In this talk we shall focus on the basic ideas behind Thuillier’s result, in particular the construction of a punctured tubular neighborhood of a singularity. We shall then present some applications to radicial and quotient singularities motivated by recent work of Kerz and Saito. (Received September 08, 2010)