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Xavier Caruso, Université de Rennes 1, Rennes, France, and David Savitt* (savitt@math.arizona.edu), Department of Mathematics, University of Arizona, 617 N. Santa Rita Ave., Tucson, AZ 85721. *Hodge, Newton, and tame inertia polygons.*

Let ρ be a de Rham representation. Attached to ρ are two polygons, the Newton polygon and the Hodge polygon, obtained from the admissible filtered module associated to ρ by Fontaine theory; admissibility entails, among other things, that the Hodge polygon lies below the Newton polygon. A third polygon, the tame inertia polygon of ρ , may be computed from the reduction of ρ modulo p. We discuss the relationship between the tame inertia polygon and the Hodge and Newton polygons. (Received September 17, 2007)