

Exposé du jeudi 07 octobre 2010

CARTIER CRYSTALS

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Résumé : In recent joint work with Gebhard Böckle we introduced a category of (quasi-)coherent sheaves M which are equipped with an additive map $C : M \rightarrow M$ which satisfies $C(r^{p^e} m) = rC(m)$. The standard example is the Cartier morphism on the top differentials of a smooth variety. The resulting category is called Cartier Modules. An important structural result that we obtained is that, up to nilpotent actions, every object in the category of Cartier Modules has finite length. In my talk I will explain this result and draw attention to some of the applications of the theory.

¹Les jeudis matin, de 10 h 30 à 11 h 30, salle 004, IRMAR (bâtiment 22), Université de Rennes 1, Campus de Beaulieu