

# Triangulated Categories of Log Motives over a Field

*vendredi 17 juillet 2020 15:30 (1 heure)*

In this talk I will sketch the construction and highlight the main properties of a new motivic category for logarithmic schemes, log smooth over a ground field  $k$  (without log structure). This construction is based on a new Grothendieck topology (called the “dividing topology”) and on the principle that homotopies should be parametrised by the affine line with compactifying log structure. The resulting category  $\log DM$  shares many of the fundamental properties of Voevodsky’s  $DM$ , that can be faithfully embedded inside it, and can be used to represent cohomology theories that are not  $A^1$ -homotopy invariant (like Hodge cohomology or Hodge-Witt cohomology). If time permits, we will discuss some conjectures relating the étale version of our category with integral coefficients with the Milne-Ramachandran category of integral étale motivic complexes. This is a joint work with D. Park (Zurich) and P.-A. Østvær (Oslo).

## Summary

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