Séminaire d'algèbre, topologie et géométrie
Jeudi 26 janvier à 14h
Salle de conférences

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Sobolev sheaves on the definable topology

Sheaves on manifolds are good objects to deal with local problems, but from the point of view of tame geometry, the usual topology contains many open sets of pathological nature, which makes the family of open subanalytic sets (or definable sets in some fixed o-minimal structure) a good candidate for replacing the usual topology. On the subanalytic topology, sheaves that are defined by functional spaces are very important in the study of irregular holonomic D-modules, but unfortunately many functional spaces are not of local nature. For negative fractional Sobolev spaces, a sheafification (in the derived sense) was given by G. Lebeau. In this talk, we will focus on the problem of transforming Sobolev spaces H^s (for $s > 0$) into sheaves on the definable site.