



Du
11
FÉV.
2015

13h00
-
14h30

RÉGA

Pierre Schapira "Microlocal Euler classes and index theorem"

IHP
Salle 314

Pierre Schapira (IMJ)
Microlocal Euler classes and index theorem

I will show how to adapt the formalism of Hochschild homology for coherent sheaves on a complex manifold to a wide class of sheaves, including constructible sheaves on a real manifold M , \mathcal{D} -modules on a complex manifold and, more generally, elliptic pairs. For that purpose, we have to work "microlocally", that is, on the cotangent bundle $\pi : T^*M \rightarrow M$ and the role of Hochschild homology is played by $\pi^{-1}\omega_M$, the inverse image of the topological dualizing complex on M (after having chosen a base ring \mathbf{k}). Then, to what we call a trace kernel we associate its microlocal Euler class, a class on T^*M supported by the microsupport of the kernel. The main theorem asserts that this class is functorial with respect to the composition of kernels. This construction gives a new approach to the Riemann-Roch or Atiyah-Singer theorems.

URL de la page : https://www.ihp.fr/fr/agenda/pierre-schapira-microlocal-euler-classes-and-index-theorem&is_pdf=true



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HORAIRES

Lundi au vendredi : 8h30 à 18h
Fermé les jours fériés