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CENTRO DE MATEMÁTICA E  
APLICAÇÕES FUNDAMENTAIS  
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# SEMINÁRIO DE D-MÓDULOS E SINGULARIDADES

Dia 22 de Janeiro de 2009 (quinta-feira), às 10 horas, na Sala B1-01

“Examples of classifications of the stack of perverse sheaves”

**Delphine Dupont**

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## Abstract

The aim of this talk is to show how the stack theory can be used to glue description of the category  $\mathcal{Perv}_X$  of perverse sheaves on a stratified space  $X$ .

First at all, I'll recall the equivalence, due to Galligo Granger Maisonobe, between the category  $\mathcal{Perv}_{\mathbb{C}^n}$  and a category of quiver's representations.

Then I'll recall the definition of a stack and I'll give a characterization of the 2-category of stack on  $\mathbb{C}^n$ .

This is allow me to define a stack on  $\mathbb{C}^n$  equivalent to the stack of perverse sheaves on  $\mathbb{C}^n$ .

Finally I'll show how this construction can be used to give descriptions of the category  $\mathcal{Perv}_X$ , where  $X$  is  $\mathbb{C}^2$  stratified by a generic lines arrangement or a smooth toric variety.

Local:

**COMPLEXO INTERDISCIPLINAR DA U.L.**

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