

# Character for locally constact stacks

Pietro Polesello

Locally constant stacks on a space  $X$  are the higher analogue of locally constant sheaves, and they are classified by their 2-monodromy, i.e. a representation of the the fundamental groupoid of the loop space of  $X$ . In this talk I show how to associate to a locally constant stack on  $X$  its character, that is, an equivariant locally constant sheaf on the loop space. This is done by using the notion of categorical trace introduced by Ganter and Kapranov. In the case of  $X = BG$  for a given topological group  $G$ , on gets a class of very simple character sheaves on  $G$ .