THE SPRINGER FIBER OF TYPE A.

GIOAN PAGNON

Abstract

The study of the nilpotent cone of a Lie algebra found its great motivation in 1970 thanks to Brieskorn which established a first bridge between the rational double points of a surfaces and the complex simple Lie algebras. In 1975 H. Esnault showed again this connection while passing by the Springer Resolution which was obtained by this last in 1968. Spaltenstein and Steinberg highlight a bijection between the irreducible components of the of Springer fiber and the standard tableaux. While basing itself on this correspondence we will present a few properties relating to the Springer fiber.