

# **Vector boson fusion in the frame of singlet scalar extended Standard Model**

*S. Benzahia and N. Bouayed*

Universite de Blida

## **Abstract**

In the framework of the singlet scalar extended standard model, we calculate the cross section of the vector boson fusion into top quark pairs relatively to the gluons fusion one. We also study the importance of different helicity states. Then we investigate the new physics effects induced by this extension.

**Key words:** Beyond Standard Model, Higgs Physics