



Contribution ID: 458

Type: **not specified**

Big-bang nucleosynthesis with a long-lived charged massive particle including ^4He spallation processes

Thursday, 1 September 2011 15:50 (20 minutes)

We propose helium-4 spallation processes induced by long-lived stau in supersymmetric standard models, and investigate an impact of the processes on light elements abundances. We show that, as long as the phase space of helium-4 spallation processes is open, they are more important than stau-catalyzed fusion and hence constrain the stau property.

T.-Jittoh, K.-Kohri, M.-Koike, J.-Sato, K.-Sugai, M.-Yamanaka
and K.-Yazaki, arXiv:1105.1431 [hep-ph].
(accepted for publication in Phys. Rev. D)

Presenter: Dr YAMANAKA, Masato (KEK(High Energy Accelerator Research Organization))

Session Classification: Parallel Session 9