



Contribution ID: 15

Type: Oral presentation using Zoom

The light thermal scalar dark matter with singlet scalar mediator

Thursday, 28 October 2021 10:48 (24 minutes)

Recent direct detection experiments put the strong constraint on WIMPs at the electroweak scale, and people have started focusing on light DM scenario. For the light thermal scalar DM, it is usually constrained by the CMB observation because it annihilate at s-wave. Despite of CMB constraint, We have revealed that some parameter regions are still surviving for the model with singlet scalar mediator, which are resonant annihilation region and forbidden annihilation region. We analyze these regions quantitatively, considering theoretical and experimental constraints.

1st preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

2nd preferred time slot for your oral presentation

13:00-15:00 JST (6:00-8:00 CEST, 0:00-2:00 EDT, 21:00-23:00 PDT)

Presenter: KATAYOSE, Taisuke (Osaka University)

Session Classification: O-2: Fixed target / Dark sectors / Applications outside particle physics

Track Classification: Parallel sessions: Transversal Task Forces: Session O: Fixed target / Dark sectors / Applications outside particle physics