



Contribution ID: 31

Type: **Contributed talk**

Dark Matter effects on high-redshift universe

Wednesday 10 November 2010 12:10 (20 minutes)

I will show recent results on the study of decaying/annihilating dark matter (DM) candidate effects in the high-redshift Universe. After a brief introduction to the physics of reionization and the exotic scenario in which DM contributes to reionize the Universe, I will discuss how to constrain this contribution. To this aim, a new numerical code, MEDEA (Monte Carlo Energy Deposition Analysis), was developed, which allows to follow the energy deposition of high-energy cascades produced by leptons injected into the InterGalactic Medium. Results obtained within this approach will be presented and discussed.

Primary author: Dr EVOLI, Carmelo (SISSA/ISAS, Trieste, Italy)

Co-authors: Prof. FERRARA, Andrea (SNS, Pisa, Italy); Dr VALDES, Marco (IPMU, Tokyo, Japan)

Presenter: Dr EVOLI, Carmelo (SISSA/ISAS, Trieste, Italy)

Session Classification: Session 2

Track Classification: Reionization