ORIGIN OF THE ³HE AND D FLUX MEASURED BY AMS

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The flux of ³He and Deuterium has been studied by simulation in the conditions of the AMS experiment, along the same lines as reported in [?]. The study has been conducted on the basis of the available nuclear collision models for particle production mechanisms (fragmentation, participant fireball, nuclear coalescence) involving the incident proton and helium Cosmic Ray flux. The simulation results are compatible with the AMS data. A contribution of the simple (forward angle) ion fragmentation is ruled out. Contributions of other production mechanisms are discussed.

References

[1] L. Derome et al., Phys. Lett. B 489(2000)1