

IRN Terascale @ Montpellier



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Ultra-Relativistic Freeze-Out During Reheating

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Dark matter remains one of the major puzzles of both modern cosmology and particle physics. While the freeze-out mechanism is getting more and more constrained, motivating revisions during non-standard cosmologies such as reheating, the freeze-in mechanism is intrinsically difficult to probe, motivating people to invoke stronger couplings. In this talk, I will present an alternative through relativistic freeze-out during reheating. While usual relativistic freeze-out usually overproduces dark matter, I will present how entropy injection during reheating can properly dilute the dark matter abundance to match observations, thus opening a new window for dark matter production.

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Classification de Session: Dark Universe

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