



## Séminaire de Physique Théorique

Jeudi 27 Novembre 2008

à 11h00 à l'auditorium

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### WIMP dark matter annihilation in the first stars

**Résumé :** Within the framework of a  $\Lambda$ CDM Universe, the first generation of stars to form (Population III.1) has very peculiar characteristics. Recent studies show that their astrophysical peculiarities may also enhance the effects of WIMP dark matter annihilation on their birth and life. I will describe the physical mechanisms by means of which this happens, and their effects on the stellar properties. I will also briefly comment on how the effects on stellar populations could be possibly used astrophysical experiments for constraining DM properties.