

ARNOLD SOMMERFELD

**CENTER** FOR THEORETICAL PHYSICS



## Sommerfeld Theory Colloquium

## Prof. Maxim Pospelov

## University of Victoria, Canada

## Did the Universe undergo the stage of catalyzed nuclear fusion?

If the upcoming LHC experiment discovers long-lived heavy charged particles, often predicted in the supersymmetric versions of the Standard Model, one should not get overly surprised:

we may already see hints on their existence in the observations of the primordial lithium abundance! In this talk, I explain how the big bang nuclear chemistry works, and how the nonstandard particle physics can catalyze nuclear reactions, drastically changing the abundance of trace elements such as lithium and beryllium.

Wednesday, 12<sup>th</sup>December 07, 11:15 h, Room 348 / 349, Theresienstr. 37 / III