



Contribution ID: 43

Type: **not specified**

A large void versus the cosmological constant: still no verdict.

Tuesday, April 19, 2011 5:00 PM (15 minutes)

The evidence for the cosmological constant Λ relies crucially on the postulate that we do not live in a special place: the cosmological principle. To strengthen the evidence, we must test that postulate and rule out alternatives. In this talk I will show how a very large spherically symmetric void can fit all existing evidence for Λ simultaneously: the CMB, BAO, SN and H_0 , while using only Dark Matter and General Relativity but no Λ . The purpose is to point out the different roles of assumptions and observations in the evidence for Λ . Finally I will discuss the tests that should be performed in the future to rule out such a scenario, putting Λ on a firmer basis.

Primary author: Dr VALKENBURG, Wessel (ITTK, RWTH Aachen)

Presenter: Dr VALKENBURG, Wessel (ITTK, RWTH Aachen)

Session Classification: Contributed Talks