

Institut Ruđer Bošković
ZAVOD ZA TEORIJSKU FIZIKU
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ZAGREB, HRVATSKA

SEMINAR ZAVODA ZA TEORIJSKU FIZIKU
(Zajednički seminari Zavoda za teorijsku fiziku,
Zavoda za eksperimentalnu fiziku i Zavoda za teorijsku fiziku PMF-a)

Predicted the Higgs mass, Multiple Point Principle, Production in Big Bang Time of Alternative vacuum bubbles, Tunguska and Kimberlites

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Mjesto: IRB, dvorana I krila

Abstract:

We claim that the recently found Higgs boson has just a mass 125 GeV, which is extremely close to the updated predictions of the Higgs mass by C.D. Froggatt, Yasutaka Takanishi and myself based on the hypothesis of the present vacuum being degenerate in energy density with an alternative vacuum with a Higgs field expectation value close to the Planck scale. Using this coincidence as a support for “Multiple Point Principle” I mention the application of the latter to explain the fine-tuning of the weak scale, a small perl model for dark matter, which can produce the geological phenomenon, kimberlites, when they fall like Tunguska events. You could call it that dark matter makes diamonds.

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