

Institut Ruđer Bošković  
ZAVOD ZA TEORIJSKU FIZIKU  
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ZAGREB, HRVATSKA

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

## Finestructure constants from degenerate vacua and gauge bosons also in families

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### **Abstract:**

The three finestructure constants of the Standard model extrapolated to the Planck scale are reproduced by use of the hyperbola with parameters calculable in perturbation approximation. The model has no new physics involved, except one or two orders of magnitude under the Planck energy scale. Our agreement is so good that it would not occur accidentally in more than one out of about 2000 cases!

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