Contribution ID: **35**   Type: **Oral**

Six-loop calculations of the critical exponents in the phi^4 theory

Tuesday, 2 September 2014 15:15 (25 minutes)

We present results of the six loop renormalization group calculations of the critical exponents in $O(n)$-symmetric ϕ^4 theory in the framework of ϵ-expansion (minimal subtraction scheme). Technical details of this calculations are discussed. Obtained results are compared with experimental data and with results of other theoretical approaches like $1/n$ expansion, renormalization group in fixed space dimension, high temperature expansion and Monte-Carlo simulations.

Primary authors: Mr BATKOVICH, Dmitrii (SPbSU); Dr KOMPANIETS, Mikhail (SPbSU)

Presenter: Dr KOMPANIETS, Mikhail (SPbSU)

Session Classification: Computations in Theoretical Physics: Techniques and Methods

Track Classification: Computations in Theoretical Physics: Techniques and Methods