

MAFIA - seminář, který se neodmítá

**The form factor program - a review and
new results - Sine-Gordon, $SU(N)$ and
 $O(N)$ models.**

Michail Karowski
Freie Universität Berlin
Institute of Physics

**středa 27.11. 2013 od 13:30 v místnosti
T112**

Fakulta jaderná a fyzikálně inženýrská ČVUT
Trojanova 13, 12000 Praha

Abstract: The purpose of the "bootstrap program" for integrable quantum field theories in $1 + 1$ dimensions is to construct explicitly a model in terms of its Wightman functions. In this talk, the "bootstrap program" is briefly reviewed and mainly illustrated in terms of the Sine-Gordon, the $SU(N)$ Gross-Neveu and the $O(N)$ sigma model. The form factor equations are solved by means of the off-shell version of the nested algebraic Bethe ansatz. The main result presented in this talk is the general form factor formula, written as an integral representation, which provides the solution of all form factors equations. Some explicit examples of exact form factors are presented.