16th MCnet meeting

Wednesday, September 27, 2017 - Friday, September 29, 2017

KIT Physics Highrise (30.23)

Book of Abstracts

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Developing a BLHA interface for VBFNLO

Calculating the Casimir force using the boundary element method

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I will give a brief introduction to the Casimir effect and present a new method for calculating the Casimir force from the scalar field on compact objects. The Casimir pressure is expressed in terms of an integral equation defined on the boundaries on the objects. A crucial part of the calculation is the renormalization procedure used. The method was first developed by Isak Kilen in his master thesis in 2012 together with his supervisor Per Jakobsen, and extended by Karl Øyvind Mikalsen in 2014 and by Marius Utheim in 2016.