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**FAKULTA  
JADERNÁ  
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VÝZKUMNÝ ÚKOL

# Simulace hadronového kalorimetru nHCal pro ePIC experiment

Czech Technical University in Prague  
Faculty of Nuclear Sciences and Physical Engineering

Department of Physics  
Nuclear and Particle Physics



**FACULTY OF  
NUCLEAR SCIENCES  
AND PHYSICAL  
ENGINEERING  
CTU IN PRAGUE**

RESEARCH TASK

# Simulation of hadronic calorimeter nHCal for ePIC experiment

## Acknowledgements

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## Bibliografický záznam

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## Abstrakt

## Bibliographic entry

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## Abstract

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# Introduction

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# Chapter 1

## ePIC Experiment



# Chapter 2

## nHCal

extensively from pre-TDR - new iteration in two weeks - is it worth the wait?  
WHERE IS THE GOOGLE DOC?  
Overview from some Leszek's presentation? is Leszek relevant?

### 2.1 Motivation

still tail catcher of nEcal (what is that really, only of that?)  
start with HERA (maybe) - then continue from that ("to not make the same mistake")  
Vector meson - the matrix image + the 012K plots  
only for  $e + \text{Au}$  and  $\phi$ , or also  $e + p$ , and  $J/\psi$ ?

### 2.2 Construction

realistic dimensions and location  
tiling? is it really important?  
does clustering make sense to mention? - probably somewhere else (simulations)  
changes?  
sampling, N layers, ... ok, but what about material e.g.?  
sampling fraction - possible to be compensating (Elke says NO)? what did Subhadip prove, then? - how achieved? how calculated?  
but what about true construction? does Leszek now? does anybody?  
two images from BP? or something else? cite myself?  
anything about neutrons? meaningful?  
is tilt usable? if for VU, also for DP?

### 2.3 ?

# Summary

byyyyeeee

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