## LHC on the March

Wednesday 16 November 2011 - Friday 18 November 2011 IHEP, Theoretical Division



# **Book of Abstracts**

## **Contents**

The Tsiolkovsky Memorial House	1
The State Museum of the history of cosmonautics named by K.E. Tsiolkovsky	1
Higgs searches in ATLAS (SM and MSSM)	1
Heavy-flavor measurements in pp and Pb-Pb collisions with the ALICE experiment at the CERN LHC	1
Top physics in ATLAS	1
J/psi production measurements in pp and PbPb collisions with ALICE at LHC $ \ldots  \ldots $	1
Jets, transverse missing energy and tau reconstruction in ATLAS	2
Charged track reconstruction and b-tagging performance in ATLAS	2
SUSY searches in ATLAS	2
Electron and photon identification and reconstruction in ATLAS	2
Top models of diffractive scattering to falsify at the LHC	2
Electroweak physics in ATLAS	3
Identified primary hadrons spectra in p p and Pb Pb collisions with the ALICE detector at the LHC	3
QCD studies with the ATLAS detector	3
Status and performance of CMS	3
Higgs search by CMS	3
QCD and forward results from CMS	3
Recent results from ALICE	4
Vector bosons escaping from the brane	4
SUSY and exotica searches by CMS	4
Search for a heavy neutrino and right-handed W of the left-right symmetric model in pp collisions at sqrt(s) =7 TeV (CMS)	4
Heavy quark vs heavy hadron production	4

Tetraquarks composed of 4 heavy quarks	4
EWK results from CMS	4
LHCb: status and physics results	5
ALICE femtoscopy results of PbPb and pp collisions at LHC	5
New photosensors for the CMS HCAL upgrade	5
B-Physics studies with the ATLAS detector	5
bbar b quarkonia production at LHCb	5
Konstantin Tsiolkovsky, grandfather of russian space science (Short introduction towards the Thursday excursion to Kaluga)	5
pi0 and eta meson production in pp collisions at 0.9,2.76 and 7 TeV measured with ALICE	5
$K/\pi$ ratio and strangeness suppression in pp collisions at the LHC	6
Opening address	6
Experience of long-term operation under ALICE experiment of the automated cooling system of electromagnetic calorimeter PHOS	6
Exotics searches in ATLAS	6
Structure of control over electromagnetic calorimeter PHOS in ALICE experiment	6
Bc production at LHCb	7
Towards the ATLAS upgrade	7
Closing address	7

#### Excursion to Kaluga / 42

#### The Tsiolkovsky Memorial House

http://www.gmik.ru/dom\_en.html

#### **Summary**:

http://www.gmik.ru/dom\_en.html

**Excursion to Kaluga / 41** 

# The State Museum of the history of cosmonautics named by K.E. Tsiolkovsky

http://www.gmik.ru/index\_en.html

#### **Summary**:

http://www.gmik.ru/index\_en.html

Evening session / 39

### Higgs searches in ATLAS (SM and MSSM)

Corresponding Author: nansi.andari@cern.ch

Evening session / 27

# Heavy-flavor measurements in pp and Pb-Pb collisions with the ALICE experiment at the CERN LHC

Corresponding Author: r.averbeck@gsi.de

Evening session / 34

#### Top physics in ATLAS

**Morning Session / 28** 

# J/psi production measurements in pp and PbPb collisions with ALICE at LHC

Corresponding Author:	francesco.bossu@cern.ch
-----------------------	-------------------------

**Morning Session / 7** 

#### Jets, transverse missing energy and tau reconstruction in ATLAS

Author: Noel Dawe<sup>1</sup>

**Morning Session / 11** 

#### Charged track reconstruction and b-tagging performance in AT-LAS

**Author:** Andrea Favareto<sup>1</sup>

Evening session / 37

#### **SUSY searches in ATLAS**

Corresponding Author: mirjam.fehling@physik.uni-freiburg.de

**Morning Session / 9** 

## Electron and photon identification and reconstruction in ATLAS

**Author:** Valentina Gallo<sup>1</sup>

**Evening session / 16** 

#### Top models of diffractive scattering to falsify at the LHC

Author: Anton Godizov<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> SFU Simon Fraser University (CA)

<sup>&</sup>lt;sup>1</sup> Sezione di Milano (INFN)-Universita e INFN

<sup>&</sup>lt;sup>1</sup> Universitaet Bern (CH)

<sup>&</sup>lt;sup>1</sup> IHEP, Protvino

#### Evening session / 19

#### Electroweak physics in ATLAS

Corresponding Author: justin.adam.griffiths@cern.ch

**Morning Session / 13** 

# Identified primary hadrons spectra in p p and Pb Pb collisions with the ALICE detector at the LHC

**Author:** Barbara Guerzoni<sup>1</sup>

<sup>1</sup> Universita e INFN (IT)

Evening session / 14

#### QCD studies with the ATLAS detector

Author: Emlyn Hughes<sup>1</sup>

<sup>1</sup> Columbia University (US)

Evening session / 24

### Status and performance of CMS

Corresponding Author: manfred.jeitler@cern.ch

Evening session / 38

### Higgs search by CMS

 $\textbf{Corresponding Author:} \ artur. kalinowski@cern.ch$ 

Evening session / 15

### QCD and forward results from CMS

Author: Igor Katkov<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> KIT - Karlsruhe Institute of Technology (DE)

**Evening session / 25** 

#### **Recent results from ALICE**

Corresponding Author: yuri.kharlov@cern.ch

**Morning Session / 45** 

#### Vector bosons escaping from the brane

Corresponding Author: kirpich@ms2.inr.ac.ru

Evening session / 48

#### SUSY and exotica searches by CMS

Corresponding Author: mikhail.kirsanov@cern.ch

Evening session / 35

# Search for a heavy neutrino and right-handed W of the left-right symmetric model in pp collisions at sqrt(s) =7 TeV (CMS)

Corresponding Author: mikhail.kirsanov@cern.ch

**Morning Session / 32** 

## Heavy quark vs heavy hadron production

Corresponding Author: anatoli.likhoded@cern.ch

**Morning Session / 33** 

#### Tetraquarks composed of 4 heavy quarks

Corresponding Author: alexey.luchinsky@ihep.ru

**Evening session / 18** 

#### **EWK results from CMS**

Corresponding Author: letizia.lusito@cern.ch

Evening session / 23

#### LHCb: status and physics results

Corresponding Author: irina.machikhiliyan@cern.ch

**Morning Session / 20** 

#### ALICE femtoscopy results of PbPb and pp collisions at LHC

Corresponding Author: ludmila.malinine@cern.ch

Morning Session / 10

#### New photosensors for the CMS HCAL upgrade

Corresponding Author: iouri.musienko@cern.ch

**Morning Session / 29** 

### B-Physics studies with the ATLAS detector

Corresponding Author: ioannis.nomidis@cern.ch

Morning Session / 30

### bbar b quarkonia production at LHCb

Corresponding Author: vladimir.obraztsov@cern.ch

Evening session / 22

# Konstantin Tsiolkovsky, grandfather of russian space science (Short introduction towards the Thursday excursion to Kaluga)

Corresponding Author: vladimir.petrov@cern.ch

Evening session / 21

## pi0 and eta meson production in pp collisions at 0.9,2.76 and 7 TeV measured with ALICE

Corresponding Author: boris.polichtchouk@cern.ch

**Evening session / 17** 

#### $K/\pi$ ratio and strangeness suppression in pp collisions at the LHC

Author: Lidia Smirnova<sup>1</sup>

<sup>1</sup> M.V. Lomonosov Moscow State University (RU)

Corresponding Author: lidia.smirnova@cern.ch

**Morning Session / 6** 

#### Opening address

Author: Nikolai Tyurin<sup>1</sup>

<sup>1</sup> Institute for High Energy Physics (RU)

**Morning Session / 8** 

# Experience of long-term operation under ALICE experiment of the automated cooling system of electromagnetic calorimeter PHOS

Author: Oleg Vikhlyantsev<sup>1</sup>

<sup>1</sup> Russian Federal Nuclear Center (VNIIEF)

**Evening session / 36** 

#### **Exotics searches in ATLAS**

Corresponding Author: nenad.vranjes@cern.ch

**Morning Session / 12** 

# Structure of control over electromagnetic calorimeter PHOS in ALICE experiment

Author: Alexey Vyushin1

**Morning Session / 31** 

#### Bc production at LHCb

Corresponding Author: oleg.iouchtchenko@cern.ch

Evening session / 26

#### Towards the ATLAS upgrade

Corresponding Author: alexandre.zaitsev@cern.ch

Evening session / 40

## Closing address

<sup>&</sup>lt;sup>1</sup> Russian Federal Nuclear Center (RU)