

Introduction

A.Myagkov

Conferences 2010

- 35th International Conference on High Energy Physics, ICHEP 2010, July 22–28, Paris, France: **L.Gladilin**, “Identified particle production in inelastic pp events with the ATLAS detector” (on behalf of the ATLAS Collaboration), ATL-PHYS-SLIDE-2010-247. 2)
- International Workshop “First Results from the LHC and Their Physical Interpretation”, IHEP-LHC-2010, October 19–21, Protvino, Russia: **L.Gladilin**, “Measurement of D-mesons production at LHC with ATLAS” (on behalf of the ATLAS Collaboration), ATL-PHYS-SLIDE-2010-247.
- LHC Workshop on “Charm and bottom quark production at the LHC”, December 3rd, CERN: **L.Gladilin**, “ATLAS results on open heavy quark production” (on behalf of the ATLAS Collaboration)

Hadronic decays subgroup – convener **L.K.Gladilin** since February 2010

- IHEPLHC10 Conference about ATLAS Higgs Working Group achievements and perspectives, “SM Higgs boson searches in the early ATLAS data” **Tsukerman** for the ATLAS Collaboration (on behalf of Speakers Committee)
- – editor of the H+2 jets section of ATLAS Conf NOTE about H \rightarrow WW searches in 2010 data.
- – member of editorial board for three CONF notes of Top Working Group

SM:

- UE in Z+jets (IHEP)
- BEC , correlation at high multiplicity, ρ and ϕ mesons(JINR)
- $Z \rightarrow \ell \ell \gamma$ (MEPhI)
- τ lifetime (BINP)
- Calibration of EMEC calorimeter with W and Z decays (BINP)
- Lambda production (PNPI)
- Electron identification (PNPI)

B-physics

- ▶ SINP MSU
- ▶ Inclusive $D^{(*)}$ production
- ▶ Associated W and charm production
- ▶ $B_s \rightarrow \mu\mu$ sensitivity limit and new projections
- ▶ $B_{\pm} \rightarrow J/\psi K_{\pm}$ observation
- ▶ Inclusive and exclusive B-channel cross sections and lifetimes
- ▶ $B_c \rightarrow J/\psi \pi$ observation
- ▶ IHEP B_s study

Higgs

- ▶ Analysis of real data with dilepton trigger (mumu, emu and ee) to measure/check backgrounds to $H \rightarrow WW \rightarrow ll$ process and detailed data/MC comparison focusing on $H \rightarrow WW \rightarrow ll\nu\nu$ searches (discovery or exclusion) (ITEP)
- ▶ $pp \rightarrow WH(bb)$ (JINR)
- ▶ Zbb as a background to Higgs boson (*JINR*)

Exotics

- ▶ Long lived double charged particles (MEPhI)
- ▶ Heavy graviton resonances in decays to an electron-positron pair (JINR)
- ▶ Z^* (JINR,PNPI)
- ▶ Heavy neutrinos (BINP)

Heavy Ions

- ▶ Reconstruction in TRT for HI. J/ψ and Υ production in HI. (MEPhI)
- ▶ J/ψ and Υ production in HI. (JINR)

Workshops

- ▶ ATLAS Higgs workshop at JINR. May
- ▶ LHCIHEP workshop IHEP November
- ▶ Brainstorming workshop on applications from ATLAS using EU-funding for R&D-upgrades
JINR