# Laboratory Work Report No. 1

Practical Scientific Writing

Kone Siriki

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Peoples' Friendship University of Russia, Moscow, Russia

Joint Institute for Nuclear Research, Dubna, Russia

Information

### **Presenter**

- Kone Siriki
- Physics and Mathematics Student
- Professor at the Department of Applied Informatics and Probability Theory
- Peoples' Friendship University of Russia
- konesirisil@yandex.ru
- https://github.com/skone19



# Work Objectives and Tasks

The objective of this laboratory work is to install TexLive.

Tasks: Review and work with the installation of TexLive.

**Theoretical Introduction** 

# **Installing TeXlive**

**TeX Live** — the most complete LaTeX distribution supported by the TeX community.

- Supports a large number of operating systems
- Developed since 1996
- Based on the teTeX distribution
- MacTeX a variant for MacOS
- Main page: https://www.tug.org/texlive/
- TeX Live is a distribution with continuous updates as part of the annual version of the distribution

# Installation from distribution packages (lections?)

### **Ubuntu:**

apt install texlive-full

Windows (using Chocolatey package manager):

# Updating to the next version of TeXlive

It is recommended to install the new version of TeX Live separately.

- But you can do a manual update using an existing installation
- Let's assume that our architecture is x86\_64-linux
- If you have installed symbolic links to system directories (via installer option or tlmgr path add), remove them:

### 1.1 Installing TeX Live

tlmgr path remove

- Move the entire TeX Live directory to match the new version, for example:
  - mv /usr/local/texlive/2024/ /usr/local/texlive/2025
- Remove package backups:

```
rm /usr/local/texlive/2025/tlpkg/backups/*
```

### LaTeX Basics

You can recreate the cache lualatex under the user:

```
mv ~/.texlive2024 ~/.texlive2025
luaotfload-tool -fu
```

If you don't do this, the cache will be recreated on the first run of lualatex.

**Laboratory Work Execution** 

# Before installing TeXlive

(see Fig. (fig:001?))

```
Invite de commandes
Microsoft Windows [version 10.0.22621.4317]
(c) Microsoft Corporation. Tous droits réservés.
C:\Users\KONE>tex --version
'tex' n'est pas reconnu en tant que commande interne
ou externe, un programme exécutable ou un fichier de commandes.
C:\Users\KONE>pdflatex --version
'pdflatex' n'est pas reconnu en tant que commande interne
ou externe, un programme exécutable ou un fichier de commandes.
C:\Users\KONE>tlmgr --version
'tlmgr' n'est pas reconnu en tant que commande interne
ou externe, un programme exécutable ou un fichier de commandes.
C:\Users\KONE>
```

## After installing TeXlive

## (see Fig. (fig:002?))

```
dicrosoft Windows [version 10.0.22621.4317]
(c) Microsoft Corporation. Tous droits réservés.
::\Windows\System32>choco install texlive
Installing the following packages:
By installing, you accept licenses for the packages.
Progress: Downloading texlive 2025,20250902.0... 100%
texlive package files install completed. Performing other installation steps.
 he package texlive wants to run 'chocolatevinstall.ps1'.
Do you want to run the script?([Y]es/[A]ll - yes to all/[N]o/[P]rint): Y
Additional parameters for installer:
Writing Profile
Writing Profile using Passed Parameters.
TeX Live Profile will be written to C:\tools\texlive.profile
Extracting C:\ProgramData\chocolatey\lib\texlive\tools\install-tl.zip to C:\tools\install-tl-22092515...
 :\tools\install_tl_22002515
Automated TeX Live installation using profile: C:/tools/texlive.profile
Loading https://mirror.truenetwork.ru/CTAN/systems/texlive/tlnet/tlpkg/texlive.tlpdb
Installing TeX Live 2025 from: https://mirror.tru<u>enetwork.ru/CTAN/systems/texlive/tlnet (verified)</u>
Platform: windows => 'Windows (64-bit)'
Distribution: net (downloading)
Using URL: https://mirror.truenetwork.ru/CTAN/systems/texlive/tlnet
Directory for temporary files: C:\Users\KONE\AppData\Local\Temp\chocolatev\81Mz9UaMk9
Installing to: C:\texlive\2025
Installing [1/6. time/total: ??:??/??:??]: hyphen-base [23k]
Installing [2/6, time/total: 00:01/12:11]: kpathsea [1042k]
Installing [3/6, time/total: 00:05/01:16]: luatex [1957k]
[nstalling [4/6. time/total: 00:09/00:48]: texlive-scripts [556k]
Installing [5/6, time/total: 00:13/00:58]; texlive.infra [610k]
```

# **Verifying TeXlive installation**

## (see Fig. (fig:004?))

C:\Users\KONE>tlmgr --version

```
Microsoft Windows [version 10.0.22621.4317]
(c) Microsoft Corporation. Tous droits réservés.
C:\Users\KONE>tex --version
TeX 3.141592653 (TeX Live 2025)
kpathsea version 6.4.1
Copyright 2025 D.E. Knuth.
There is NO warranty. Redistribution of this software is
covered by the terms of both the TeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the TeX source.
Primary author of TeX: D.E. Knuth.
C:\Users\KONE>pdflatex --version
pdfTeX 3.141592653-2.6-1.40.28 (TeX Live 2025)
kpathsea version 6.4.1
Copyright 2025 Han The Thanh (pdfTeX) et al.
There is NO warranty. Redistribution of this software is
covered by the terms of both the pdfTeX copyright and
the Lesser GNU General Public License.
For more information about these matters, see the file
named COPYING and the pdfTeX source.
Primary author of pdfTeX: Han The Thanh (pdfTeX) et al.
Compiled with libpng 1.6.46: using libpng 1.6.46
Compiled with zlib 1.3.1; using zlib 1.3.1
Compiled with xpdf version 4.04
```

**Conclusion** 

## Conclusion

Thus, the objective of installing TeXlive was achieved.

Thank you for your attention