

Installing PARI/GP 2.10.0 for ZETAS 2018

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Introduction

This document explains how to install the version [2.10.0](#) of the PARI/GP computer algebra system which will be used during the summer school ZETAS 2018

Windows users

Download a precompiled 64bit installer `Pari64-2-10-0.exe`
or 32bit binary `Pari32-2-10-0.exe` from

`http://pari.math.u-bordeaux.fr/pub/pari/unstable/`

Also available are precompiled 64bit binary
`gp64-gmp-2-10-0.exe` or 32bit binary
`gp32-gmp-2-10-0.exe`.

Mac OS users

Download a precompiled DMG

`PariGP-full-2.10.0.alpha.dmg` from

`http:`

`//pari.math.u-bordeaux.fr/pub/pari/unstable/`

on some system, you need to right-click on the icon and select open, so that you can bypass the security check.

Also available is a precompiled binary `gp-2.10.0-osx`.

Linux users

To install all the packages required to build pari from source:

Debian/Ubuntu

```
sudo apt-get build-dep pari
sudo apt-get install libreadline-dev libgmp-dev
```

Fedora

```
sudo dnf install readline-devel gmp-devel
```

If you want to use git, also do

Debian/Ubuntu

```
sudo apt-get install git bison
```

Fedora

```
sudo dnf install git bison
```

From source with GIT

Clone the PARI repository with GIT (~ 75MB).

```
git clone http://pari.math.u-bordeaux.fr/git/pari.git
cd pari
```

From source without GIT

Download `pari-2.10.0.alpha.tar.gz` from

`http://pari.math.u-bordeaux.fr/pub/pari/unstable/`

and unpack it

```
tar xf pari-2.10.0.alpha.tar.gz
cd pari-2.10.0.alpha
```

PARI compilation

```
./Configure --prefix=GPDIR --mt=pthread  
make -j4 gp  
make doc  
make statetest-all  
make install  
make install-bin-sta  
GPDIR/bin/gp
```


GP configuration

Create and customize `~/.gprc`. Add

```
histfile = "~/.gp_history"
colors = "lightbg" \\ or "darkbg"
lines = 40
parisizemax = 4G \\ or the maximum amount of memory
                \\ GP can use (important)
read "~/.gprc.gp"
```

Create an empty file `~/.gprc.gp`

Updating GIT

To update GIT to the most recent revision:

```
git fetch
git rebase origin/master
./Configure -l
make install
```