

How to download and some useful resources

Quantum Espresso Tutorial 2019

Quick start guide

Download

<https://www.quantum-espresso.org/>



[HOME](#) [PROJECT](#) [DOWNLOAD](#) [RESOURCES](#) [PSEUDOPOTENTIALS](#) [CONTACTS](#) [NEWS & EVENTS](#)

NEWS

08.04.19

QUANTUM ESPRESSO V.6.4.1

The 6.4.1 version of QUANTUM ESPRESSO is available for download. For more information please see t...

04.03.19

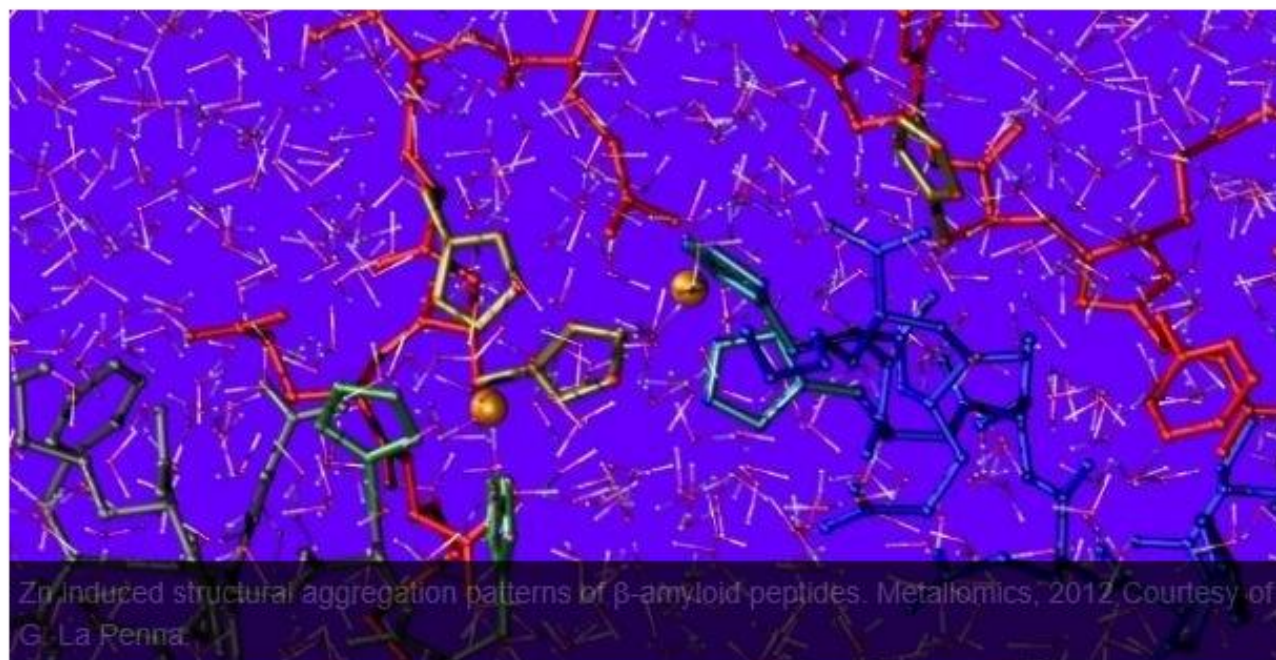
QUANTUM ESPRESSO V.6.4 AND QUANTUM ESPRESSO FOR GPU

The 6.4 version of QUANTUM ESPRESSO is available for download. For more information please see t...

28.01.19

DEVELOPERS' MEETING 2019

Slides, discussion material and reports of the



QUANTUM ESPRESSO

is an integrated suite of Open-Source computer codes for electronic-structure calculations and materials modeling at the nanoscale. It is based on density-functional theory, plane waves, and

Download

<https://www.quantum-espresso.org/>



NEWS

08.04.19

QUANTUM ESPRESSO V.6.4.1

The 6.4.1 version of QUANTUM ESPRESSO is available for download. For more information please see t...

04.03.19

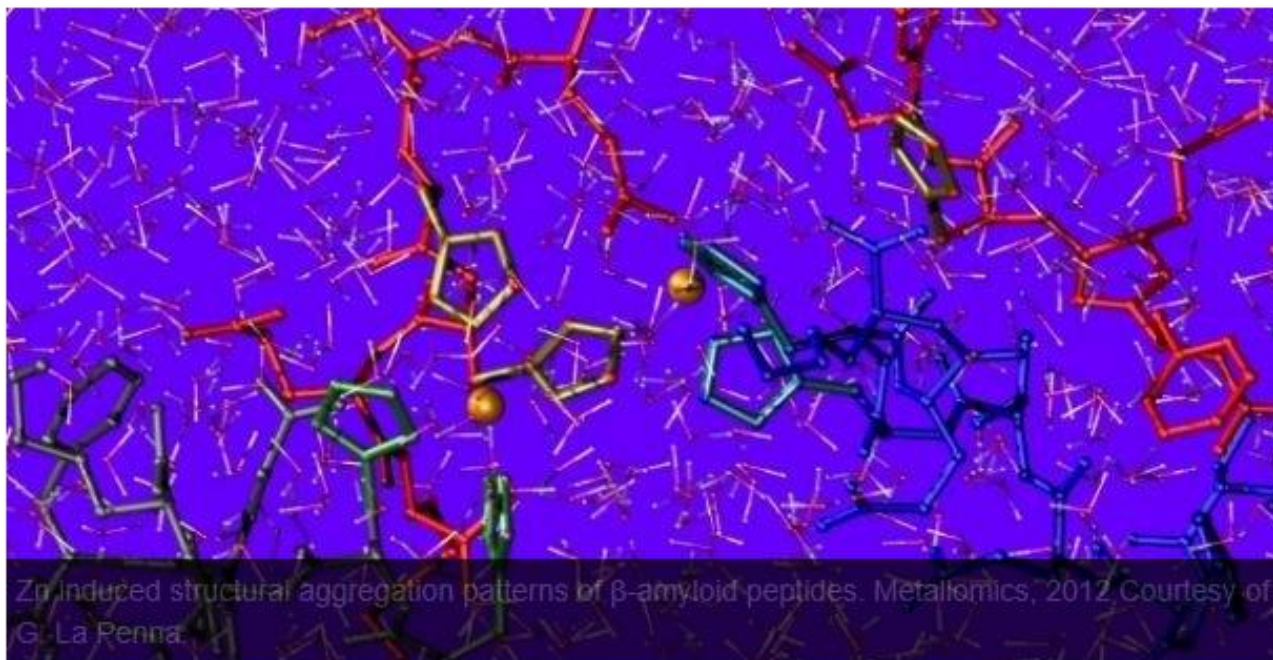
QUANTUM ESPRESSO V.6.4 AND QUANTUM ESPRESSO FOR GPU

The 6.4 version of QUANTUM ESPRESSO is available for download. For more information please see t...

28.01.19

DEVELOPERS' MEETING 2019

Slides, discussion material and reports of the



QUANTUM ESPRESSO

is an integrated suite of Open-Source computer codes for electronic-structure calculations and materials modeling at the nanoscale. It is based on density-functional theory, plane waves, and



DOWNLOAD SITES

[GitHub Dowload page](#)[GitLab Download page](#)[GPU-enabled version](#)[Schroedinger version](#)[Git repository](#)[Git mirror on GitHub](#)[Versions older than v.5](#)

DOWNLOAD

How to cite?

QUANTUM ESPRESSO is an Open Source distribution. We shall greatly appreciate if scientific work done using QUANTUM ESPRESSO will contain an explicit acknowledgement and the following references:

P. Giannozzi *et al.*, J.Phys.:Condens.Matter **21**, 395502 (2009) <http://dx.doi.org/10.1088/0953-8984/21/39/395502>

P. Giannozzi *et al.*, J.Phys.:Condens.Matter **29**, 465901 (2017) <http://iopscience.iop.org/article/10.1088/1361-648X/aa8f79>

(Full reference, BibTeX format). Please also see the [user documentation of each specific package](#) for further recommended citations.

How to download?

QUANTUM ESPRESSO is currently distributed as source packages, but selected binary packages for Linux, Mac-OS and Windows are also available. The current stable version can be downloaded from

- [GitHub](#) (recommended), or alternatively from
- [GitLab](#) (click on the "cloud with a down arrow" to download).


Download

<https://github.com/QEF/q-e/releases>

Problems fixed in 6.4.1 branch :

- Two bugs fixed in HP: 1) the code was not working correctly when fractional translations were present, 2) there was a bug in the case when either there is only one k point, or when k pools are used and some of the pools have only one k point.
- Restart of ph.x with 2D boundary conditions has been fixed (see gitlab issue #102)
- XML file correctly written if tetrahedra are used (see gitlab issue #103)

▼ Assets 5

 backports-6.4.1.diff	25.4 KB
 patch_old_intel_to_6.4.1	16.6 KB
 qe-6.4.1_release_pack.tgz	80.3 MB
 Source code (zip)	
 Source code (tar.gz)	



Do you want to open or save **q-e-qe-6.4.1.tar.gz** from **codeload.github.com**?

Open

Save

Cancel



Pseudopotentials

<https://www.quantum-espresso.org/>



[HOME](#) [PROJECT](#) [DOWNLOAD](#) [RESOURCES](#) [PSEUDOPOTENTIALS](#) [CONTACTS](#) [NEWS & EVENTS](#)

NEWS

08.04.19

QUANTUM ESPRESSO V.6.4.1

The 6.4.1 version of QUANTUM ESPRESSO is available for download. For more information please see t...

04.03.19

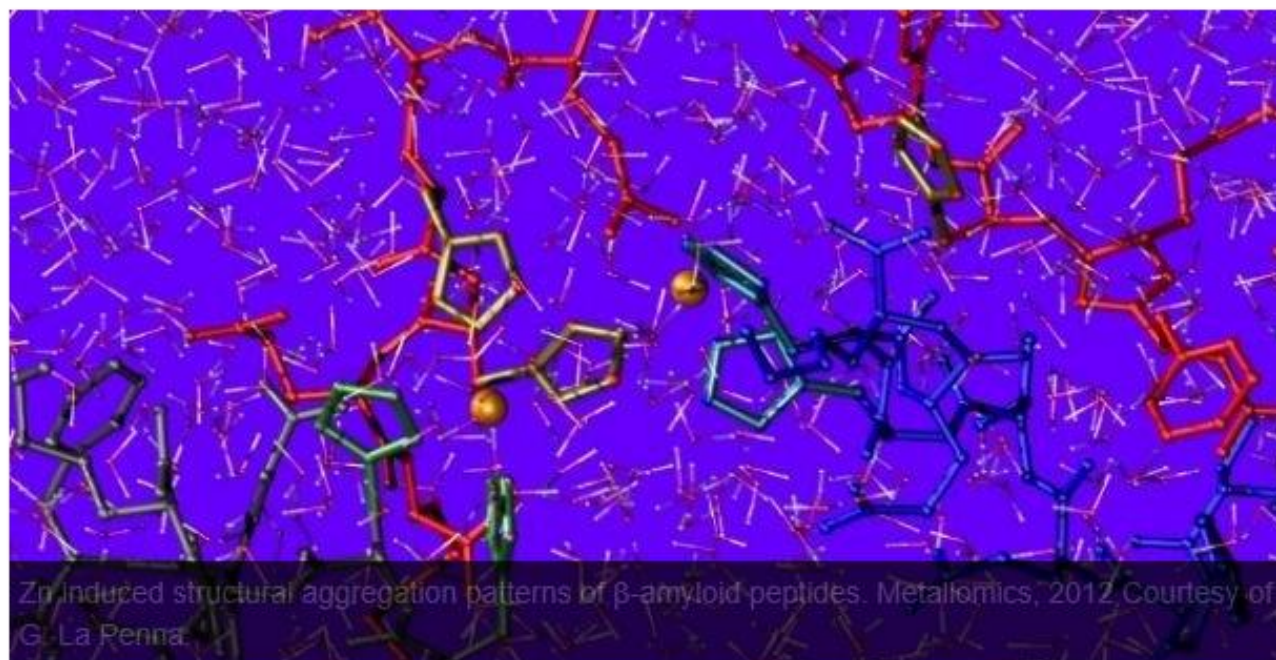
QUANTUM ESPRESSO V.6.4 AND QUANTUM ESPRESSO FOR GPU

The 6.4 version of QUANTUM ESPRESSO is available for download. For more information please see t...

28.01.19

DEVELOPERS' MEETING 2019

Slides, discussion material and reports of the



QUANTUM ESPRESSO

is an integrated suite of Open-Source computer codes for electronic-structure calculations and materials modeling at the nanoscale. It is based on density-functional theory, plane waves, and



PSEUDOPOTENTIALS

[More about pseudopotentials](#)

[SSSP on Materials Cloud](#)

[Pseudo DoJo](#)

[ONCV Potentials](#)

[SCAN pseudopotentials](#)

[PSlibrary table](#)

[Original QE PP table](#)

[Hartwigesen-Goedecker-Hutter PP table](#)

[Old FHI PP table](#)

PSLIBRARY

Ready-to-use pseudopotentials from [PSlibrary](#) (*recommended*). For other ready-to-use tables, follow the links of the menu at the left. For more info, see [here](#).

1 H																	2 He	
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne	
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar	
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr	
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe	
55 Cs	56 Ba	57-70 *	71 Lu	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
87 Fr	88 Ra	89-102 **	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt									

*	57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb
**	89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No

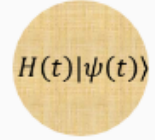
Some useful resources

- Official quantum espresso website
- <https://www.quantum-espresso.org/>
- Other important resources
 - Documentation <https://www.quantum-espresso.org/resources/users-manual>
 - Examples offered by the software
 - Pseudopotentials:
 - Official site: <https://www.quantum-espresso.org/pseudopotentials>
 - SSSP: <https://www.materialscloud.org/discover/sssp/table/efficiency>
 - Google...



Next

- Hands-on: download and resources
- Installation



QuantumNerd

