# Documentation of quantumarticle.cls

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# 1 Introduction

# 2 Package options

## 2.1 Document setup

#### 2.1.1 Document format

The document class does not specify a default document format, an error is raised if none is specified.

Option	Description
a4paper	Sets the paper size to A4.
a5paper	Sets the paper size to A5.
b5paper	Sets the paper size to B5.
letterpaper	Sets the paper size to letter. TODO: official name
legalpaper	Sets the paper size to legal. TODO: official name
executivepaper	Sets the paper size to executive. TODO: official name

#### 2.1.2 Orientation

The default orientation is portrait.

Option	Description
landscape	Sets the orientation of the document to landscape.

#### 2.1.3 Fontsize

The default font size is  $10\mathrm{pt}.$ 

Option	Description
10pt	Sets the normal fontsize to 10pt.
11pt	Sets the normal fontsize to 11pt.
12pt	Sets the normal fontsize to 12pt.

#### 2.1.4 Sides

The default siding is oneside TODO: better word than siding.

Option	Description
oneside	Prepares the document as onesided.
twoside	Prepares the document as twosided.

#### 2.1.5 Titlepage

By default, the document class is typset with no extra titlepage.

Option	Description
titlepage	Displays the title on a separate titlepage.
notitlepage	Displays the title on the same page as the text.

#### 2.1.6 Draft

By default, the document class is typset as final.

Option	Description
draft	Marks the document as a draft.
final	Does not mark the document as a draft.

# 2.2 Style options

#### 2.2.1 Equations

By default, equations are typset centered, with equation numbers on the right. TODO: Clear fleqn behaviour

Option	Description
fleqn leqno	Display equations left aligned.  Display equation numbers to the left of the equation.

## 2.2.2 Bibliography

Option	Description	
openbib	TODO: Find out what openbib does.	

# 2.3 Pre-loaded packages

The document class only loads packages necessary for its operation, such as **geometry** or **hyperref**. For compatibility reasons, there are also commands that load certain widely used classes for the user.

Option	Description
amsfonts	Load the package amsfonts.
noamsfonts	Don't load the package amsfonts.
amssymb	Load the package amssymb.
amssymbol	n
noamssymb	Don't load the package amssymb.
amsmath	Load the package amsmath.
noamsmath	Don't load the package amsmath.

#### 2.4 Publication

By default, all documents that are created with the quantumarticle documentclass are treated as possible submissions to Quantum.

Option	Description
accepted=YYYY-MM-DD	Adds the note 'Accepted in Quantum YYYY-MM-DD' to the document.
unpublished	Intended for works that are not published in Quantum. Disables all Quantum-
	related branding.
noarxiv	Intended for works that are not meant to be uploaded to the arXiv. Disables all
	arXiv-related sanity checks in the document. This option also sets unpublished.

## 2.5 Compatibility

The quantumarticle class aims to be maximally compatible with documents that were previously typset with other document classes. For this reason, a lot of options are present for the sole purpose of compatibility but don't have an effect on how your document will be typset. These include:

Option	Description
checkin	No effect.
preprint	"
reprint	— » —
manuscript	"
noshowpacs	<u> </u>
showpacs	<u> </u>
showkeys	<u> </u>
noshowkeys	<u> </u>
balancelastpage	<u> </u>
nobalancelastpage	<u> </u>
nopreprintnumbers	<u> </u>
preprintnumbers	— » —
hyperref	<u> </u>
bibnotes	<u> </u>
nobibnotes	<u> </u>
footinbib	<u> </u>
nofootinbib	<u> </u>
altaffilletter	<u> </u>
altaffilsymbol	<u> </u>

```
superbib
                       --- " ----
citeautoscript
                       ___ ;; ___
                       ___ ,, ___
longbibliography
nolongbibliography
eprint
noeprint
author-year
                       ___ " ___
numerical
                       ___ " ___
galley
                       ___ " ___
raggedbottom
                       --- " ----
tightenlines
                       — " —
                       ___ " ___
lengthcheck
                       ___ " ___
reprint
eqsecnum
                       __ " __
secnumarabic
floats
                       ___ ;; ___
stfloats
                       ___ ;; ___
                       ___ ,, ___
endfloats
endfloats*
                      ____ ;; ____
                       ___ " ___
osa
osameet
opex
                       ___ " ___
                       ___ ;; ___
tops
josa
                     — " —
byrevtex
                      ___ " ___
                      ___ ;; ___
floatfix
                       __ " __
nofloatfix
                       ___ ;; ___
ltxgridinfo
outputdebug
raggedfooter
                       ___ ,, ___
                       ___ ;; ___
noraggedfooter
frontmatterverbose - " -
linenumbers
                       ___ ;; ___
                       ___ ,, ___
nomerge
                       ___ ,, ___
hypertext
frontmatterverbose - " -
inactive
                       ___ ,, ___
groupedaddress
unsortedaddress
                       ___ " ___
runinaddress
                       ___ ;; ___
superscriptaddress — " —
                       Triggers revtex compatibility mode
aps
pra
                       — " —
prb
pre
                       ___ ;; ___
                       ___ ;; ___
prl
prx
                       ___ " ___
                       ___ ;; ___
aip
```

# 3 Further information