

The Title of Your Paper

Your Name¹

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A concise abstract summarizing the point in a few sentences goes here.

INTRODUCTION

Words explaining the context go here. Much of [Gerch's wise advice about giving talks](#) applies here, too. The introduction could end with an outline of what's going to happen in the rest of the paper.

FILES TO INCLUDE

I've found it useful to keep a collection of tex macros all in one place, rather than copying them to the top of every file I use. [Here](#) is the current version. You can put it in the same directory as your tex file, or you can put it in some directory that your tex engine looks at when it compiles, such as `Library/texmf/tex/latex`.

A bibliography style file that makes nice links to the arxiv is [here](#). You can put this in the local directory or in `Library/texmf/bibtex/bst`.

EQUATIONS AND FIGURES

Here is an in-line equation $\vec{F} = m\vec{a}$. Here is a displayed equation.

$$\vec{F} = m\vec{a}$$

Here is a numbered equation:

$$\vec{F} = m\vec{a} \tag{0.1}$$

(0.1) is a numbered equation. You have to latex the document twice to get the number to appear.

This sentence is red.

This sentence is in a patch of grey background.

There is some vertical space before this sentence.

Here is how to include a figure called figure-name.png:

```
\includegraphics[width=0.41\textwidth]{figure-name.png}
```

HOW TO MAKE THE BIBLIOGRAPHY

To make the bibliography you have two options.

1. You can get the references from e.g. [Spire](#)s (click on LaTeX(US)) or Google Scholar and paste them into a list below, like this:

```
\begin{thebibliography}{99}
%\cite{Polyakov:1976fu}
\bibitem{Polyakov:1976fu}
  A.~M.~Polyakov,
  ‘‘Quark Confinement and
  Topology of Gauge Groups,’’
  Nucl.\ Phys.\ B {\bf 120}, 429 (1977).

%\cite{Belavin:1976vj}
\bibitem{Belavin:1976vj}
  A.~A.~Belavin and A.~M.~Polyakov,
  ‘‘Quantum Fluctuations
  of Pseudoparticles,’’
  Nucl.\ Phys.\ B {\bf 123}, 429 (1977).
\end{thebibliography}
```

This requires you to put them in the right order, which is silly.

2. Alternatively you can use BibTeX: Paste the BibTeX entries (on Spire or Google Scholar, click on BibTeX; the [Physical Review Online](#) website also exports BibTeX references) into a file called *e.g.* collection.bib. The entries look like this:

```
@article{Polyakov:1976fu,
  author      = "Polyakov, Alexander M.",
  title       = "{Quark Confinement and Topol",
  journal     = "Nucl.Phys.",
  volume     = "B120",
  pages      = "429-458",
  doi        = "10.1016/0550-3213(77)90086-4",
  year       = "1977",
  reportNumber = "NORDITA-76/33",
  SLACcitation = "%CITATION = NUPHA,B120,429;
}
```

I find it useful to keep this file somewhere universal on my computer (namely `Library/texmf/bibtex/bib/collection.bib`) and just put every reference I ever use in there. It is a pretty fun file.

Then, instead of the bibliography list, place this command before the end:

```
\bibliographystyle{ucsd}  
\bibliography{collection}
```

The style file being included here (`ucsd.bst`) is [here](#). In this case, to compile you will have to run latex then bibtex then latex again (maybe once more for good measure) to get everything in the right place.

In either case, cite a paper like this: [1] and this: [2] and this: [3].

Acknowledgements

Here you can acknowledge people who helped you.

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- [1] A. M. Polyakov, “Quark Confinement and Topology of Gauge Groups,” *Nucl.Phys.* **B120** (1977) 429–458.
 - [2] A. Belavin and A. M. Polyakov, “Quantum Fluctuations of Pseudoparticles,” *Nucl.Phys.* **B123** (1977) 429.
 - [3] B. Swingle, “Entanglement Renormalization and Holography,” *Phys.Rev.* **D86** (2012) 065007, [0905.1317](#).