

# Referencing support for LaTeX users

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# Today:

What are LaTeX/BibTeX?

Why

Learning about LaTeX

How it works

Creation of BibTeX files/interfaces with  
reference management software

Support for students

Future plans

Discussion/questions

# What are LaTeX/BibTeX

LaTeX – a phototypesetting system which produces high quality output and an ability to handle complex mathematical formulae etc

BibTeX – for bibliography generation based on storing references separately in BibTeX (.bib) files

Why?

# Feedback

I use LaTeX – how  
do I cite and  
reference?

I use LaTeX –  
Refworks is no use  
to me

# Learning about LaTeX

We learnt the minimum we could get away with!

## **MOST USEFUL:**

[https://en.wikibooks.org/wiki/LaTeX/Bibliography\\_Management](https://en.wikibooks.org/wiki/LaTeX/Bibliography_Management)

Online tutorials e.g. Overleaf

<https://www.overleaf.com/help/28-im-new-to-latex-how-do-i-use-it#.WDdB2n2qLBw>

Teaching Fellows/students

Books

Forums

Training course (not much use)

# Barriers

No one distribution of LaTeX  
(downloadable vs web-based)

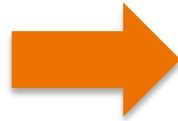
Guides needed to be relatively generic

We soon reached the limits of our  
understanding on LaTeX

We were entering Geeksville! Lots of  
forums where the answers would be  
unintelligible!

# How it works

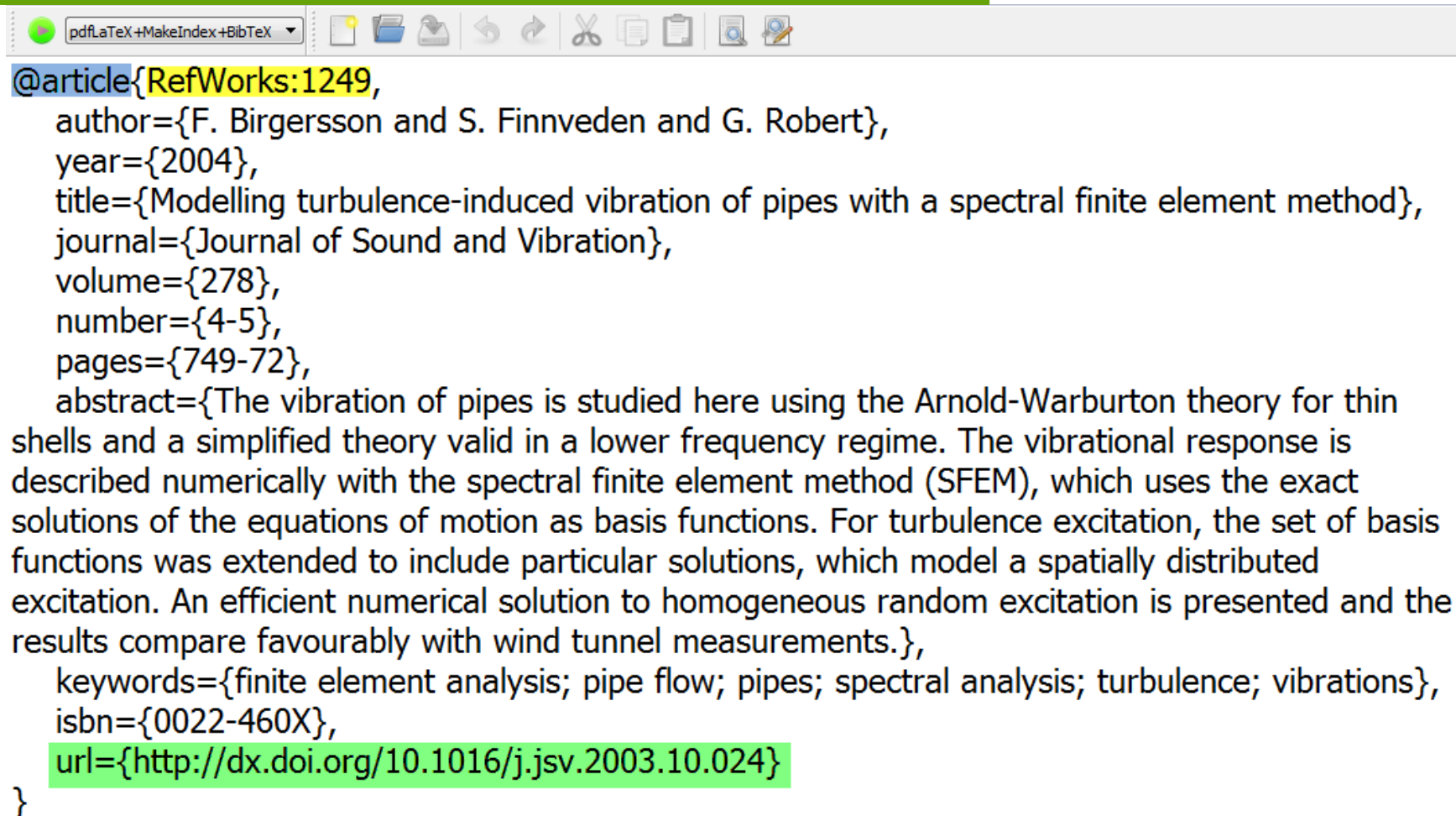
Manual input  
with formatting  
in Bibliography  
environment of  
individual  
document



Reference  
details stored in  
BibTeX file(s)  
without  
formatting,  
allowing re-use.



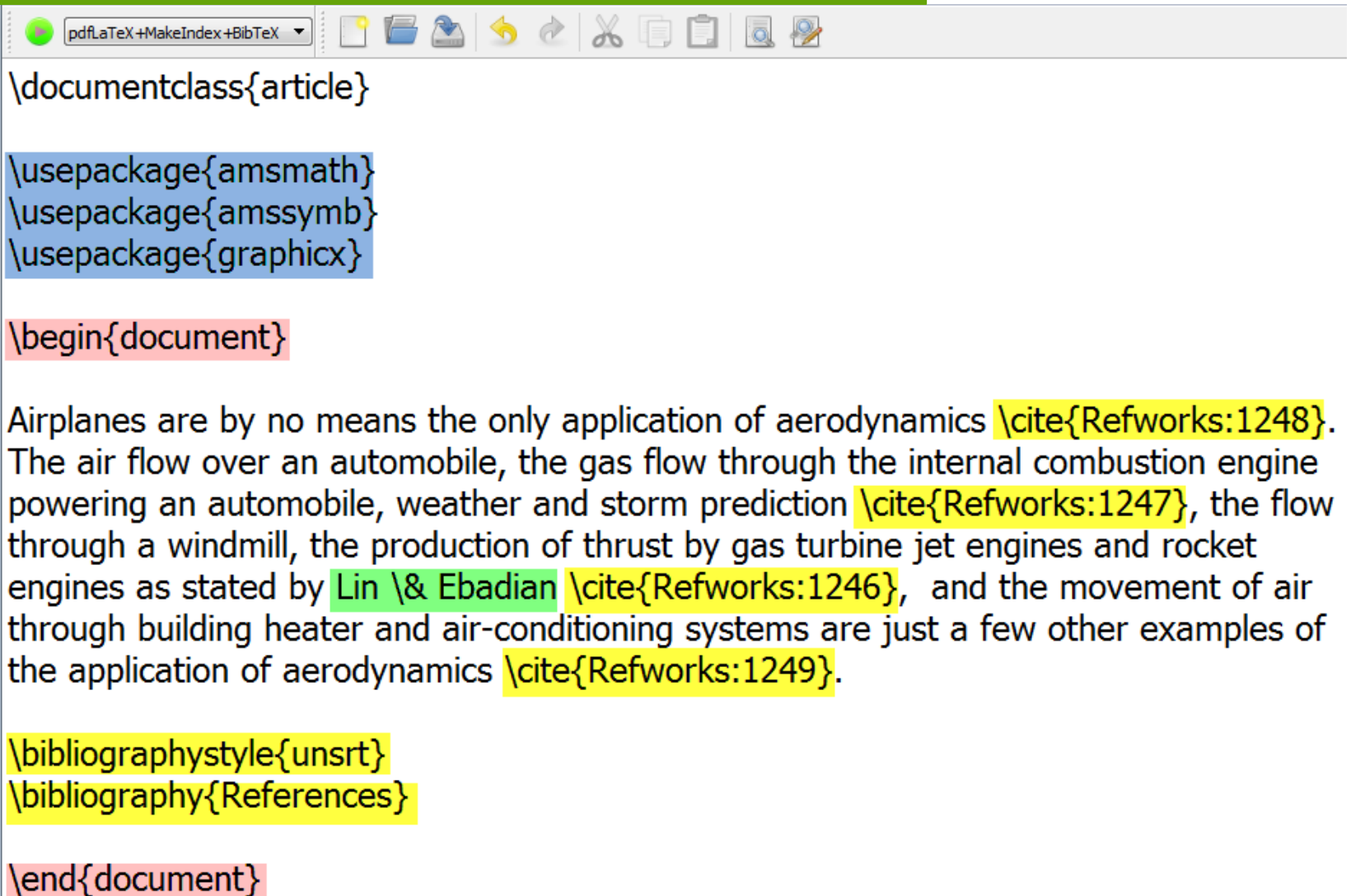
# A BibTeX file



```
@article{RefWorks:1249,  
  author={F. Birgersson and S. Finnveden and G. Robert},  
  year={2004},  
  title={Modelling turbulence-induced vibration of pipes with a spectral finite element method},  
  journal={Journal of Sound and Vibration},  
  volume={278},  
  number={4-5},  
  pages={749-72},  
  abstract={The vibration of pipes is studied here using the Arnold-Warburton theory for thin  
shells and a simplified theory valid in a lower frequency regime. The vibrational response is  
described numerically with the spectral finite element method (SFEM), which uses the exact  
solutions of the equations of motion as basis functions. For turbulence excitation, the set of basis  
functions was extended to include particular solutions, which model a spatially distributed  
excitation. An efficient numerical solution to homogeneous random excitation is presented and the  
results compare favourably with wind tunnel measurements.},  
  keywords={finite element analysis; pipe flow; pipes; spectral analysis; turbulence; vibrations},  
  isbn={0022-460X},  
  url={http://dx.doi.org/10.1016/j.jsv.2003.10.024}  
}
```

```
@article{RefWorks:1248,
```

# A LaTeX document



The image shows a screenshot of a LaTeX editor window. The title bar at the top reads "pdfLaTeX+MakeIndex+BibTeX". Below the title bar is a toolbar with icons for file operations (new, open, save, print), editing (undo, redo, cut, copy, paste), and viewing (zoom in, zoom out, full screen). The main text area contains the following LaTeX code:

```
\documentclass{article}

\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{graphicx}

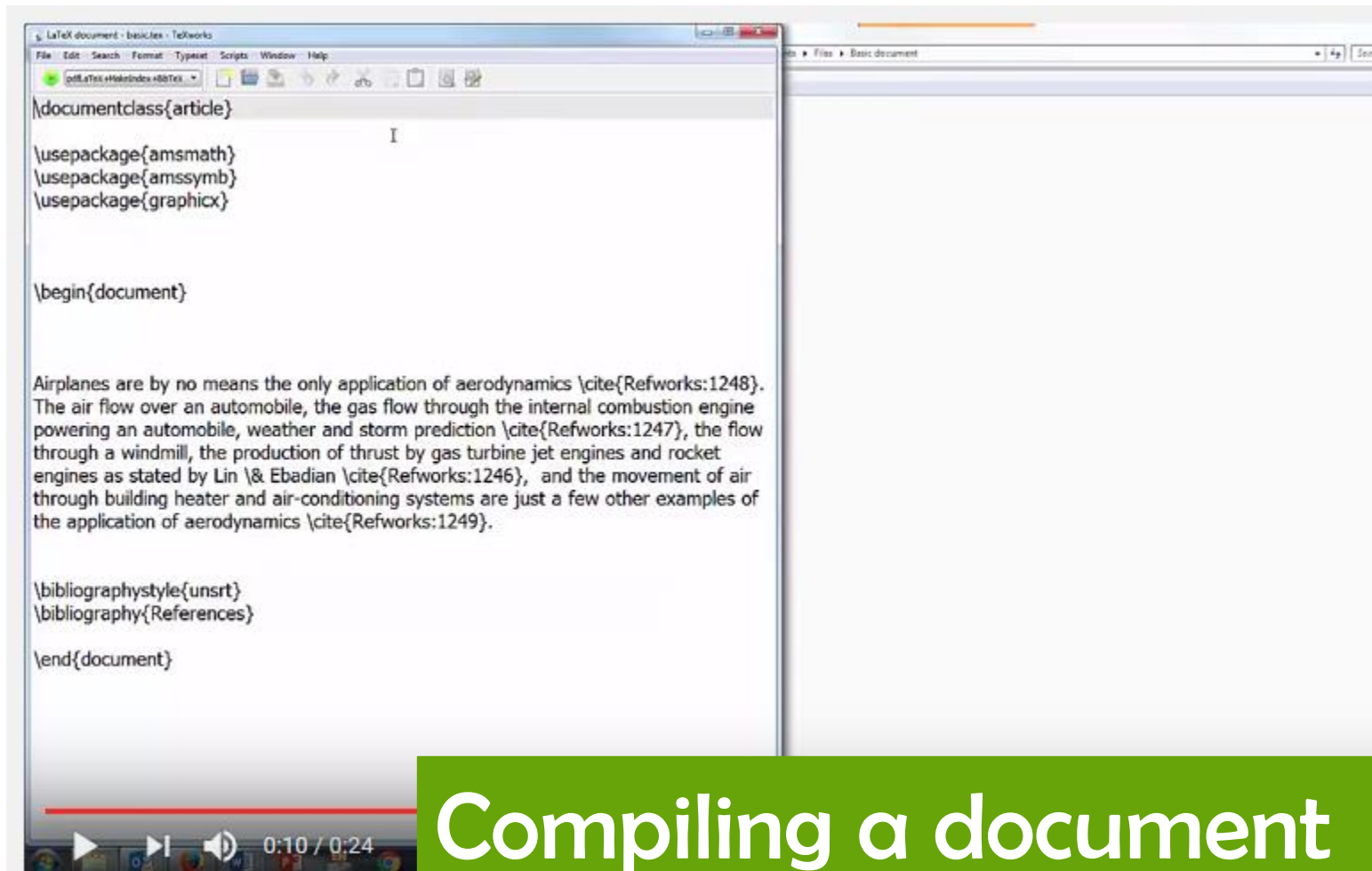
\begin{document}

Airplanes are by no means the only application of aerodynamics \cite{Refworks:1248}.
The air flow over an automobile, the gas flow through the internal combustion engine
powering an automobile, weather and storm prediction \cite{Refworks:1247}, the flow
through a windmill, the production of thrust by gas turbine jet engines and rocket
engines as stated by Lin & Ebadian \cite{Refworks:1246}, and the movement of air
through building heater and air-conditioning systems are just a few other examples of
the application of aerodynamics \cite{Refworks:1249}.

\bibliographystyle{unsrt}
\bibliography{References}

\end{document}
```

The code is color-coded: `\documentclass{article}` is black; the package loading section (`\usepackage{...}`) is blue; `\begin{document}` is pink; the main text is black with citation commands (`\cite{...}`) highlighted in yellow; the bibliography commands (`\bibliographystyle{unsrt}` and `\bibliography{References}`) are yellow; and `\end{document}` is pink.



# Compiling a document

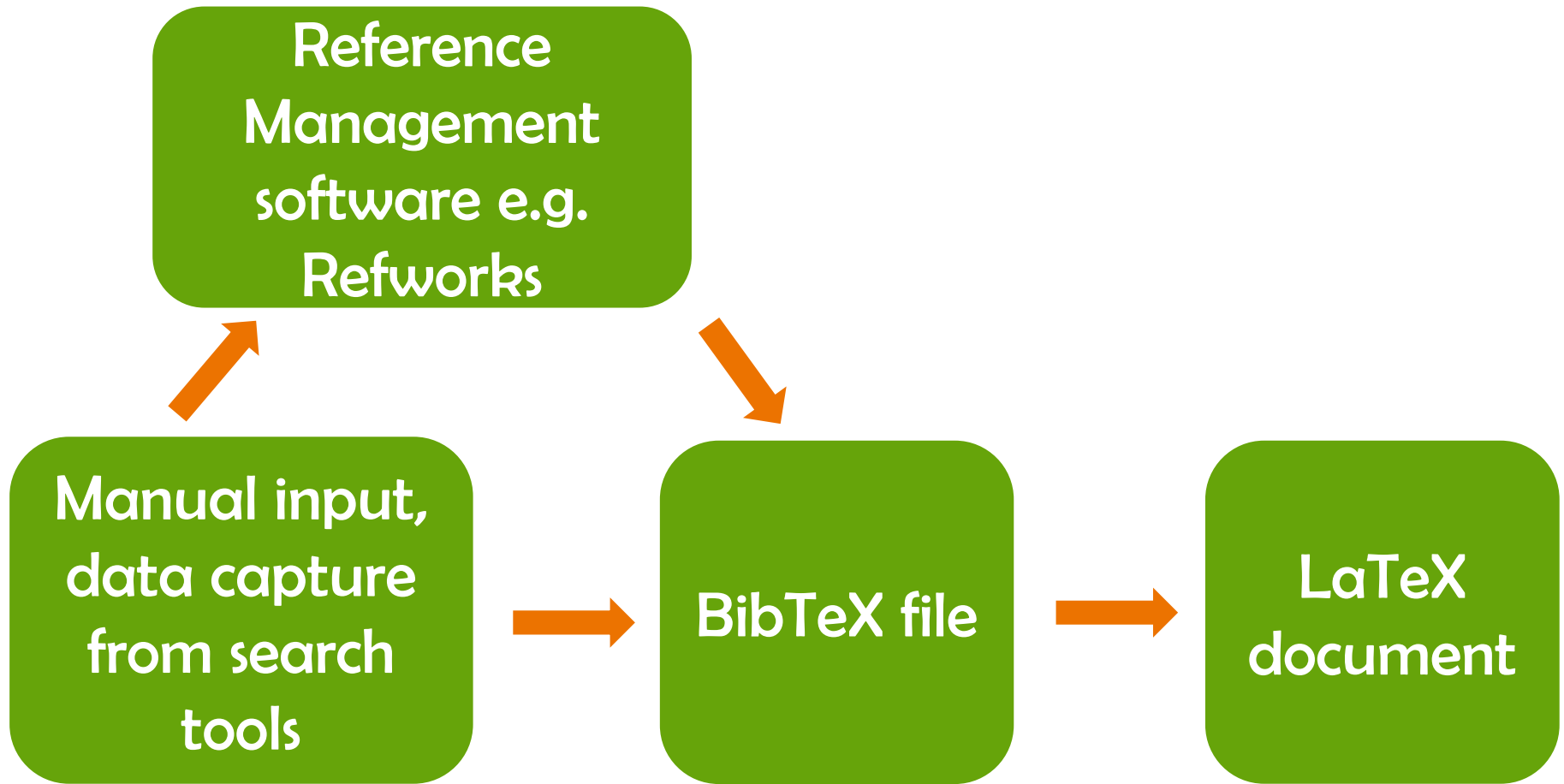
**NO** Harvard  
format and **NO**  
URLs



Harvard  
format, URLs  
included and  
more citing  
options

Natbib – going “one  
better”

# Creation of BibTeX files/interfacing with reference management software



**Reference management  
and LaTeX – data flow**

Manual

Search tools such as  
databases, publisher  
websites and Google  
Scholar

Reference  
management  
software

Creation of BibTeX files

Select: | Selected Records (3) | Remove all Selected Records

Email | Print | Download

---

### Choose your download settings for this session

Location:	Format:	Output:
<input checked="" type="radio"/> My PC	<input type="radio"/> EndNote (RIS, Ref. Manager)	<input checked="" type="radio"/> Current page view
<input type="radio"/> Mendeley	<input checked="" type="radio"/> BibTeX	<input type="radio"/> Citation
<input type="radio"/> RefWorks	<input type="radio"/> Text (ASCII)	<input type="radio"/> Abstract
<input type="radio"/> Google Drive	<input type="radio"/> CSV	<input type="radio"/> Detailed record
<input type="radio"/> Dropbox	<input type="radio"/> Excel®	
<input type="radio"/> Your Folder(s)	<input type="radio"/> PDF <input type="checkbox"/> add search summary	
	<input type="radio"/> RTF (Word®)	

---

☐ Remove all Selected Records after Save (My PC only)

Login or Register to save to My Preferences

File name prefix:  
  
\_BIB\_Date/Time.bib

Save Cancel


Creation of BibTeX files –  
e.g. Engineering Village



### Results: 7

(from Web of Science Core Collection)

You searched for: TOPIC:  
(aerodynamics thin foils) ...[More](#)


 [Create Alert](#)

### Refine Results

Sort by: Publication Date -- newest to oldest 

☐ Select Page



Save to EndNote online 


Add to Marked List

☒ 1. **High fidelity numerical simulation of the kinematics effects on flapping**

By: Yu, Meilin; Wang, Z. J.; H  
JOURNAL OF FLUIDS AND S



Full Text from P

Save to EndNote online  
Save to EndNote desktop  
Save to ResearcherID - I wrote these  
Save to InCites  
Save to Other File Formats   
Save to RefWorks

6-186 Published: OCT 2013

Creation of BibTeX files –  
e.g. Web of Science


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**Article outline** ☐ Show full outline


Abstract  
Keywords  
Introduction  
The role of libraries in geographical dat...  
Literature review  
Research in Greece, Cyprus and Spain  
Results and discussion  
Conclusions and further research  
Acknowledgements  
Appendix 1. The Questionnaire in English  
References

**Figures and tables**




  
**ELSEVIER**


**Geoskills A  
Spain**

Ifigenia Vardakosta  
Kapidakis<sup>b</sup>   
[Show more](#)  
<http://dx.doi.org/10.1016/j.geos.2016.03.001>

You have selected 1 citation for export. [Help](#)

**Direct export**

 [Save to Mendeley](#)

 [Save to RefWorks](#)

**Export file**

☐ RIS (for EndNote, Reference Manager, ProCite)

☒ BibTeX

☐ Text

**Content**

☐ Citation Only

☒ Citation and Abstract

Creation of BibTeX files –  
journal websites



Scholar Settings

Search results

Collections

#### Bibliography manager

- ☐ Don't show any citation import links
- ☒ Show links to import citations into **BibTeX** .

Creation of BibTeX files –  
Google Scholar

References > Aero MSc ACM 2016

References Organize & Share Folders

References to Use: ☐ Selected ☐ Page ☒ All in List

Sort by: Authors, Primary Change View: Imperial College - Vancou

Ref ID 1593 Journal Article Reference 1 of 6

### Export References

References to Include From Aero MSc ACM 2016:

☐ Selected (0) ☐ Page (6) ☒ All in List (6)

You can select a different folder from the folder area to the right of this window.

Select an Export Format: BibTeX - RefWorks ID

Need [Help](#) exporting references?

Export References

(3) Kaceniauskas A, Cesniene  
2006;61(5): 32-37.

Aero MSc ACM 2016;

Creation of BibTeX files –  
e.g. Refworks

# Why use reference management software?



Organize and re-use



All references/  
documents stored  
in one place



Input/export of  
BibTeX files



Editing/de-  
duplication

# Issues

LaTeX special characters in  
automatically captured data

Inconsistency in data from many sources

Guides needed to be generic – to allow  
for different LaTeX distributions

Lots of ways to achieve the same result  
(forums)

# Support for students

Library webpage – [BibTeX for LaTeX](#)

Lunchtime workshops

Basic information for LaTeX users  
provided in standard training

Enquiry service

**Feedback now**



Feedback now

Word bit no use to  
me!

LaTeX bit no use  
to me!

# Future plans

IEEE format

Familiarisation with web-based LaTeX systems (Overleaf trial)

JabRef

Liaison with departments

Style files for Imperial College styles???

Discussion/questions

