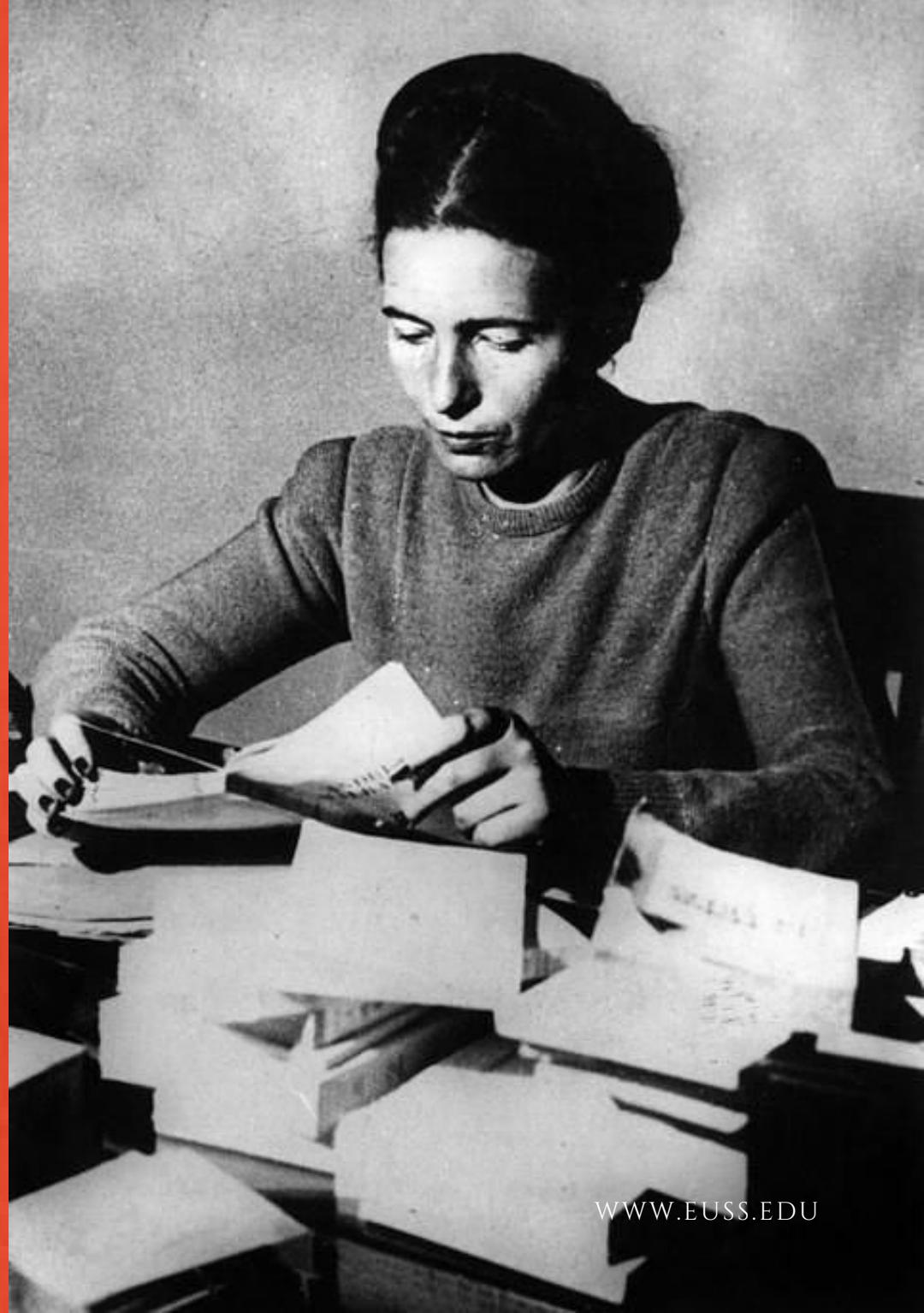


MANAGING NICELY YOUR CITATIONS

Solène Ulmer-Moll

Adapted from Tomás S. Grigera
Here's the link



Zotero



Manages easily your research sources
Firefox extension or Standalone version

[Zotero website](#)

BIB
TEX

BETTER

Better Bibtex

Creates a .bib file from your Zotero library
including its unique, easy-to-read citation keys
and automatically updated

Latest release is here

Emacs

Free text editor
Extensible, highly customisable



LET'S
SEE
HOW
IT
LOOKS

...



A Ne... | Zodia... | La do... | Sty... | The X-S... | ESO ... | Powe... | Exercice... | physi... | [16... | Reve... | Statistic... | numpy... | scipy.st... | Franc... | Scree... | New Tab | +

https://arxiv.org/abs/1608.02590 | Search | Cornell University Library | We gratefully acknowledge support from the Simons Foundation and member institutions | Help | Advanced search | All papers | Go!

Cornell University Library | arXiv.org > astro-ph > arXiv:1608.02590 | Search or Article-id | Download: PDF, PostScript, Other formats (license) | Current browse context: astro-ph.EP | < prev | next > | new | recent | 1608 | Change to browse by: astro-ph | References & Citations | NASA ADS

Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems

Stephen R. Kane | Submitted on 8 Aug 2016 (v1), last revised 23 Sep 2016 (this version, v2))

Radial velocity searches for exoplanets have detected many multi-planet systems around nearby bright stars. An advantage of this technique is that it generally samples the orbit outside of inferior/superior conjunction, potentially allowing the Keplerian elements of eccentricity and argument of periastron to be well characterized. The orbital architectures for some of these systems show signs of close planetary encounters that may render the systems unstable as described. We provide an in-depth analysis of two such systems: HD 5319 and HD 7924, for which the scenario of coplanar orbits results in rapid destabilization of the systems. The poorly constrained periastron arguments of the outer planets in these systems further emphasizes the need for detailed investigations. An exhaustive scan of parameters space via dynamical simulations reveals specific mutual inclinations between the two outer planets in each system that allow for stable configurations over long timescales. We compare these configurations with those presented by mean-motion resonance as possible stability sources. Finally, we discuss the relevance to interpretation of multi-planet Keplerian orbits and suggest additional observations that will help to resolve the system stabilities.

Comments: 10 pages, 5 figures, 1 table, accepted for publication in the *Astrophysical Journal*
Subjects: Earth and Planetary Astrophysics (astro-ph.EP)
Cite as: arXiv:1608.02590 [astro-ph.EP]

Settings

Open Zotero | **Save File**

My Library (atmospheric, debrisdisks, jesus material, Duplicate Items, Unfiled Items, Trash) | Group Libraries (IA-planets, Trash)

Zotero interface showing a list of publications:

Title	Creator	Year
On the Formation and Chemical Composition of Super Earths	Alessi et al.	2016
A terrestrial planet candidate in a temperate orbit around Proxima Centauri	Anglada-Escudé et al.	2016
Fragmentation of protoplanetary disks around M-dwarfs	Backus and Quinn	2016
HR 8799: The Benchmark Directly-Imaged Planetary System	Currie	2016
Radial-Velocity Fitting Challenge. II. First results of the analysis of the data set	Dumusque et al.	2016
EPIC 211351816.01: A (Re-?)Inflated Planet Orbiting a Red Giant Star	Grunblatt et al.	2016
A comprehensive radial velocity error budget for next generation Doppler spectrometers	Halverson et al.	2016
Modeling the RV jitter of early M dwarfs using tomographic imaging	Hébrard et al.	2016
A Transiting Jupiter Analog	Kipping et al.	2016
RE-INFLATED WARM JUPITERS AROUND RED GIANTS	Lopez and Fortney	2016
Atmospheric characterization of Proxima b by coupling the SPHERE high-contrast imager to the ESPRESSO spectrograph	Lovis et al.	2016
Evolved stars and the origin of abundance trends in planet hosts	Maldonado and Vil... (Maldonado and Vilchez)	2016
The imprint of exoplanet formation history on observable present-day spectra of hot Jupiters	Mordasini et al.	2016
Numerical recipes in C++: the art of scientific computing	Press	2002
Did Jupiter's core form in the innermost parts of the Sun's protoplanetary disk?	Raymond et al.	2016
Search for an exosphere in sodium and calcium in the transmission spectrum of exoplanet 55 Cancri e	Ridden-Harper et al.	2016
Precision velocimetry planet hunting with PARAS: Current performance and lessons to inform future extreme	Roy et al.	2016

Item Type: Journal Article
Citation Key: alessi_formation_2016
Title: On the Formation and Chemical Composition of Super Earths
Author: Alessi, Matthew
Author: Pudritz, Ralph E.
Author: Cridland, Alex J.
Abstract: Super Earths are the larg...
Publication: Saving to jesus mate...
Volume:
Issue:
Pages:

The screenshot shows a desktop environment with a file manager window open. The left sidebar lists 'My Library' with sub-folders like 'atmospheric', 'debrisdisks', and 'jesus material'. It also shows 'Duplicate Items', 'Unfiled Items', and 'Trash'. Below these are 'Group Libraries' and 'IA-planets' with its own 'Trash'. A red box labeled 'your folders' points to the 'IA-planets' section. Another red box labeled 'shared folders' points to the 'Trash' under 'Group Libraries'. The main area displays a list of files and a preview pane. A red box labeled 'your new entry' points to a file named 'Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems' which has a blue selection bar around it. To the right is a detailed view of the selected item's metadata, including fields for Creator, Year, Citation Key, Title, Author, Abstract, Publication, Volume, Issue, Pages, Date, Series, Series Title, Series Text, Journal Abbr, Language, DOI, ISSN, Short Title, and URL.

your new entry

Creator	Year
Alessi et al.	2016
Anglada-Escudé e...	2016
Backus and Quinn	2016
Currie	2016
Dumusque et al.	2016
Grunblatt et al.	2016
Halverson et al.	2016
Hébrard et al.	2016
Kane	2016
Kipping et al.	2016
Lopez and Fortney	2016
Lovis et al.	2016
Maldonado and Vi...	2016
Mordasini et al.	2016
Press	2002
Raymond et al.	2016
Ridden-Harper et ...	2016
Roy et al.	2016
Stürmer et al.	2016

Item Type: Journal Article
Citation Key: kane_resolving_2016
Title: Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems
Author: Kane, Stephen R.
(...)**Abstract:** Radial velocity searches for ex...
Publication: arXiv:1608.02590 [astro-ph]
Volume:
Issue:
Pages:
Date: 2016-08-08
Series:
Series Title:
Series Text:
Journal Abbr:
Language:
DOI:
ISSN:
Short Title: Resolving Close Encounters
URL: <http://arxiv.org/abs/1608.02590>

PDF automatically saved on your computer

Articles

File Edit View Go Bookmarks Help

Places Computer Network

Name

Size Type Date Modified

Kane_2016.pdf 5.7 MB PDF document Tue 27 Sep 2016 02:07:54 PM WEST

Anglada-Escudé_et_al_2013.pdf 140.9 kB PDF document Thu 22 Sep 2016 07:43:22 PM WEST

Figueira_et_al_2010_2.pdf 1.0 MB PDF document Thu 22 Sep 2016 07:41:37 PM WEST

Bailey_et_al_2007_3.pdf 345.7 kB PDF document Thu 22 Sep 2016 07:41:37 PM WEST

Artigau_et_al_2014_4.pdf 918.9 kB PDF document Thu 22 Sep 2016 07:41:37 PM WEST

Artigau_et_al_2014_2.pdf 918.9 kB PDF document Thu 22 Sep 2016 07:41:37 PM WEST

Trifonov_et_al_2015_4.pdf 4.4 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Trifonov_et_al_2015_2.pdf 4.4 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Fischer_et_al_2016_4.pdf 19.6 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Fischer_et_al_2016_2.pdf 9.2 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Figueira_et_al_2016_3.pdf 3.9 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Figueira_et_al_2010_4.pdf 438.1 kB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Crockett_et_al_2012_3.pdf 1.1 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Blake_et_al_2010_4.pdf 2.2 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

Blake_et_al_2010_2.pdf 2.2 MB PDF document Thu 22 Sep 2016 07:41:34 PM WEST

"Kane_2016.pdf" selected (5.7 MB), Free space: 804.7 GB

All Fields & Tags

Info Notes Tags Related

Title Creator Year

On the Formation and Chemical Composition of Super Earths Alessi et al. 2016

A terrestrial planet candidate in a temperate orbit around Proxima Centauri Anglada-Escudé et... 2016

Fragmentation of protoplanetary disks around M-dwarfs Backus and Quinn 2016

HR 8799: The Benchmark Directly-Imaged Planetary System Currie 2016

Radial-Velocity Fitting Challenge. II. First results of the analysis of the data set Dumusque et al. 2016

EPIC 211351816.01: A (Re-?)Inflated Planet Orbiting a Red Giant Star Grunblatt et al. 2016

A comprehensive radial velocity error budget for next generation Doppler spectrometers Halverson et al. 2016

Modeling the RV jitter of early M dwarfs using tomographic imaging Hébrard et al. 2016

Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems Kane 2016

Comment: 10 pages, 5 figures, 1 table, accepted for publication in the Astrophysical Journal

arXiv.org Snapshot

Kane_2016.pdf

A Transiting Jupiter Analog

RE-INFLATED WARM JUPITERS AROUND RED GIANTS

Atmospheric characterization of Proxima b by coupling the SPHERE high-contrast imager to the ESPRESSO sp...

Evolved stars and the origin of abundance trends in planet hosts

The imprint of exoplanet formation history on observable present-day spectra of hot Jupiters

Kipping et al. 2016

Lopez and Fortney 2016

Lovis et al. 2016

Maldonado and Vil... 2016

Mordasini et al. 2016

Volume: Issue: Pages: Date: 2016-08-08 y m d Series:

Item Type: Journal Article
Citation Key: kane_resolving_2016
Title: Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems
Author: Kane, Stephen R.
Abstract: Radial velocity searches f...
Publication: arXiv:1608.02590 [astro-ph]
Volume:
Issue:
Pages:
Date: 2016-08-08
Series:

Kane_2016.pdf - Okular

File Edit View Go Bookmarks Tools Settings Help

← Previous → Next Fit Width Zoom In Zoom Out Selection

Thumbnails

Contents

Reviews

Bookmarks

[astro-ph.EP] 23 Sep 2016

2- Make notes

be well characterized. The orbital architectures for some of these systems show signs of close planetary encounters that may render the systems unstable as described. We provide an in-depth analysis of two such systems: HD 5319 and HD 7924, for which the scenario of coplanar orbits results in their rapid destabilization. The poorly constrained periastron arguments of the outer planets in these systems further emphasizes the need for detailed investigations. An exhaustive scan of parameter space via dynamical simulations reveals specific mutual inclinations between the two outer planets in each system that allow for stable configurations over long timescales. We compare these configurations with those presented by mean-motion resonance as possible stability sources. Finally, we discuss the relevance to interpretation of multi-planet Keplerian orbits and suggest additional observations that will help to resolve the system stabilities.

Keywords: astrobiology – planetary systems – techniques: radial velocities – stars: individual (HD 5319, HD 7924)

1 of 10

4- Annotations in the file are added to Zotero

My Library

- atmospheric
- debrisdisks
- jesus material**
- Duplicate Items
- Unfiled Items
- Trash

Group Libraries

- IA-planets
- Trash

Title

- Numerical recipes in C++: the art of scientific computing
- On the Formation and Chemical Composition of Super Earths
- A terrestrial planet candidate in a temperate orbit around Proxima Centauri
- Fragmentation of protoplanetary disks around M-dwarfs
- HR 8799: The Benchmark Directly-Imaged Planetary System
- Radial-Velocity Fitting Challenge. II. First results of the analysis of the data set
- EPIC 211351816.01: A (Re-?)Inflated Planet Orbiting a Red Giant Star
- A comprehensive radial velocity error budget for next generation Doppler spectrometers
- Modeling the RV jitter of early M dwarfs using tomographic imaging
- Resolving Close Encounters: Stability in the HD 5319 and HD 7924 Planetary Systems
 - Comment: 10 pages, 5 figures, 1 table, accepted for publication in the *Astrophysical Journal*
 - Extracted Annotations (9/27/2016, 5:29:40 PM)
 - arXiv.org Snapshot
 - Kane_2016.pdf
- A Transiting Jupiter Analog
- RE-INFLATED WARM JUPITERS AROUND RED GIANTS
- Atmospheric characterization of Proxima b by coupling the SPHERE high-contrast imager to the ESPRESSO instrument
- Evolved stars and the origin of abundance trends in planet hosts
- The imprint of exoplanet formation history on observable present-day spectra of hot Jupiters

Creator

Creator	Year
Press	2002
Alessi et al.	2016
Anglada-Escudé et al.	2016
Backus and Quinn	2016
Currie	2016
Dumusque et al.	2016
Grunblatt et al.	2016
Halverson et al.	2016
Hébrard et al.	2016
Kane	2016
Kipping et al.	2016
Lopez and Fortney	2016
Lovis et al.	2016
Maldonado and Viñas	2016
Mordasini et al.	2016

Extracted Annotations (9/27/2016, 5:29:40 PM)

"we discuss the relevance to interpretation of multi-planet Keplerian orbits and suggest additional observations that will help to resolve the system stabilities." (Kane 2016:1)
example 1 (note on p.3)

"Figure 2." (Kane 2016:4)

Related: [click here]
Tags: [click here]

1- r. click, Open pdf with External viewer

3- r. click, Manage attachments > Extract annotations

Edit in a separate window

SOME TIPS TO INSTALL & WORK

...





Zotero website



- **Download** the Firefox extension or the standalone version on the zotero website: <https://www.zotero.org/download/>
- **Create an account**, your libraries will be accessible from your computer and from the Zotero website
- In **Zotero Settings, go to Preferences**, check all the boxes of the General tab and in the Sync tab put your username and password. This way your online library and the computer one will be synchronised
- **Install the ZotFile extension** for Firefox if you chose Zotero as Firefox extension or download the extension for the standalone version: <http://zotfile.com/>



ZotFile



Zotero

[Zotero website](#)



- In **Zotero Settings**, go to **ZotFile** preferences
- in **General Settings** you can put your Zotero folder (in Custom) where you want all the papers to be saved and check the box 'Watch for new files'
- in **Renaming Files**, if you want Author_year, put %a_%y in 'Format for all' and check the box 'Replace blanks'



ZotFile



BETTER

Better Bibtex

Latest release is here

- Install Better Bibtex from its github repository, link above
- **Steps to create a synchronised .bib file:** in Zotero, create a new collection, drag and drop some articles, export your collection (right click). In the new window, choose Format Better Bibtex or Better BibLatex depending on your editor, check the box 'Keep updated', and choose the path of you .bib file





Emacs



Free text editor

Extensible, highly customisable

Only if Emacs is your Latex editor ...

- To cite in Emacs, **RefTex package** is needed

- **Add .bib file to your Emacs initialization file**

usually in `~/.emacs.d/init.el`, add the following line:

`(setq reftex-default-bibliography '("/home/solene/writing/atmospheric.bib"))`

- **Add shortcut to cite to your Emacs init file**

`(global-set-key (kbd "C-c c") 'reftex-citation)`

RefTeX Select - emacs@localhost.localdomain

File Edit Options Buffers Tools Help

Save Undo

```
\addtolength{\textwidth}{2.5cm}
\addtolength{\textheight}{2.0cm}
\addtolength{\oddsidemargin}{-1.5cm}
\renewcommand{\baselinestretch}{0.90}

\begin{document}

\title{Notes on articles}
\author{Sol`e ne Ulmer-Moll}

\maketitle
\section{Suggested lectures}
\subsection{Je ne sais pas le titre}

je veux citer \cite{kausch_molecfit:_2015} \\
bon c'est pas mal ... \cite{smette_molecfit:_2015} \\

let's add a new citation >>>>
\

\section{let's add a new section}
and cite

\bibliographystyle{aa}
\bibliography{atmospheric}
\end{document}
```

1- Ctrl-C c in the Emacs command line
2- Search by author, word in title or in abstract
3- Select the correct citation in the right panel
4- Valid with Enter

^ **figueira_radial_2016**
Figueira, Adibekyan, Oshagh... 2016 Astronomy \& Astrophysics 586, A101
Radial Velocity Information Content of {M} Dwarf Spectra in the near-Infrared

figueira_line-profile_2015
Figueira, Santos, Pepe, Lov... 2015 Astronomy \& Astrophysics 582, C2
Line-Profile Variations in Radial-Velocity Measurements {\emph{()}}{\emph{Corrigendum}}{\emph{()}}

mayor_doppler_2014
Mayor, Lovis, Santos 2014 Nature 513, 328-335
Doppler Spectroscopy as a Path to the Detection of {{Earth}}-like Planets

delfosse_world-leading_2013
Delfosse, Donati, Kouach, H... 2013 SF2A-2013: Proceedings of the Annual meeting of the French Society of World-Leading Science with {{SPIROU}} - {{The nIR}} Spectropolarimeter / High-Precision Velocimetry

figueira_comparing_2012
Figueira, Kerber, Chacon, L... 2012 Monthly Notices of the Royal Astronomical Society 420, 2874--2880
Comparing Radial Velocities of Atmospheric Lines with Radiosonde Measurements: {{Comparing RV}} with {{CRIRES}}

figueira_radial_2010
Figueira, Pepe, Melo, Santo... 2010 Astronomy and Astrophysics 511, A55
Radial Velocities with {{CRIRES}}: {{Pushing}} Precision down to 5-10 M/S

figueira_evidence_2010
Figueira, Marmier, Bonfils,... 2010 Astronomy and Astrophysics 513, L8
Evidence against the Young Hot-{{Jupiter}} around {{BD}} +20 1790

pepe_coralie_2002
Pepe, Mayor, Galland, Naef,... 2002 Astronomy and Astrophysics 388, 632--638
The {{CORALIE}} Survey for Southern Extra-Solar Planets {{VII}}: {{Two}} Short-Period {{Saturnian}}

--**- test.tex Bot L35 [(LaTeX)]
Select: [n]ext [p]revious [r]estrict []full_entry [q]uit RET [?]Help+more

U:%*- *RefTeX Select* All L9 [(BSelect)]

BUT ALSO

- Manage duplicates
- Save books, chapters
- Add item with ISBN, DOI
- Integration with other Tex editors
- Tag multiple items
- Import old bib file
- With Emacs, look up Zotelo

AND MORE ...

