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## TIP!

### Retrieve a code quickly with its alias

Retrieve a code entry with its alias! Example: <https://ascl.net/pynbody>  
A code entry's alias (also called "short name") appears before the colon in the entry's title.

#### ASCL Code Record

[**ascl:1305.002**] [pynbody: N-Body/SPH analysis for python](#)

Pontzen, Andrew; Roškar, Rok; Stinson, Greg; Woods, Rory

Pynbody is a lightweight, portable, format-transparent analysis package for astro supporting PKDGRAV/Gasoline, Gadget, N-Chilada, and RAMSES AMR outputs. Wr publication-level analysis routines.

## TIP!

### Search for code author, technique, or code/code mention

Do a full-text search using the Search box in the upper right corner!  
Example: Search for Pontzen, SPH, python, or RAMSES

**ASCL.net**  
Astrophysics Source Code Library

Making codes discoverable since 1999

Home About Resources Browse Submissions News Forum

Pontzen Search

SPH Search

python Search

RAMSES Search

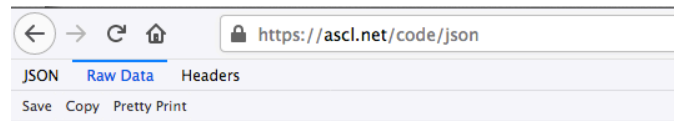
Forum Dashboard

*Search box!*

## TIP!

### Download our public data in JSON

ASCL's public data is available in JSON at <https://ascl.net/code/json>!



The screenshot shows a web browser window with the address bar containing `https://ascl.net/code/json`. Below the address bar, there are tabs for 'JSON', 'Raw Data', and 'Headers', with 'JSON' selected. Below the tabs, there are buttons for 'Save', 'Copy', and 'Pretty Print'. The main content area displays a JSON object with two entries, '1' and '2', each containing metadata for an ASCL record.

```
{
  "1": {
    "ascl_id": "9903.001",
    "title": "LENSKY: Galactic Microlensing Probability",
    "credit": "Nemiroff, Robert J.",
    "abstract": "Given a model for the Galaxy, this program computes the microlensing probability of the lens and to compute the probability of lens detection at any level of lensing. The program is currently setup to accept input from the Galactic models of Bahcall and Soneira (1990) and two input files: galmod.dsk (15 Megs) and galmod.sph (22 Megs). The output is a file lensky.out. The program is pretty self-explanatory past that.",
    "topic_id": "20392",
    "bibcode": "1999ascl.soft03001N",
    "views": "3379",
    "preferred_citation": "",
    "site_list": [
      "http://dx.doi.org/10.20356/C4WC7Q"
    ],
    "used_in": [
      "https://ui.adsabs.harvard.edu/abs/1998ApJ...509...39N"
    ],
    "described_in": false,
    "keywords": []
  },
  "2": {
    "ascl_id": "9904.001",
    "title": "BSGMODEL: The Bahcall-Soneira Galaxy Model",
    "credit": "Bahcall, John N.",
```

*results of  
JSON retrieval  
formatted with  
Pretty Print*

## TIP!

### Query our public data with our API

You can use the ASCL's new [documented API](#) to query the ASCL.

Example: Query the ASCL for all codes that do not have preferred citation information, and return the ASCL ID, name of the code, its bibcode, and the date and time the entry was last updated by clicking on this link:

[https://ascl.net/api/search/?q=citation\\_method:%22%22&fl=ascl\\_id,title,bibcode,time\\_updated](https://ascl.net/api/search/?q=citation_method:%22%22&fl=ascl_id,title,bibcode,time_updated)

See Siddha Mavuram's poster [Come search the ASCL with our new API!](#) for detailed information on the API.

## TIP!

### **Find entries for software associated with NASA missions**

Retrieve code entries funded or written by NASA for NASA missions!

Example: See all keywords at <https://ascl.net/code/keywords>

Example: See all Kepler-associated entries at <https://ascl.net/code/keywords/Kepler>

Attend Peter Teuben's presentation Tuesday at 1:20 PM on

[211.09. Increasing the visibility of NASA astrophysics software through the ASCL](#) for detailed information on this NASA ADAP project.

## TIP!

### Create a CITATION.cff file for your code to let people know how to cite it

Create a [CITATION.cff](#) file to add to your code repo from its ASCL entry by adding /CITATION.cff to the URL for an ASCL entry

Example: <https://ascl.net/1305.002/CITATION.cff>

This works for code entries with an ASCL ID. These files are intended to be a starting point; please edit the resulting file as needed.

```
cff-version: 1.1.0
message: "Please cite the following works when using this software:
https://ui.adsabs.harvard.edu/abs/2013ascl.soft05002P"
authors:
- family-names: Pontzen
  given-names: Andrew
- family-names: Roškar
  given-names: Rok
- family-names: Stinson
  given-names: Greg
- family-names: Woods
```

*truncated example;  
click on link above to  
see entire file*



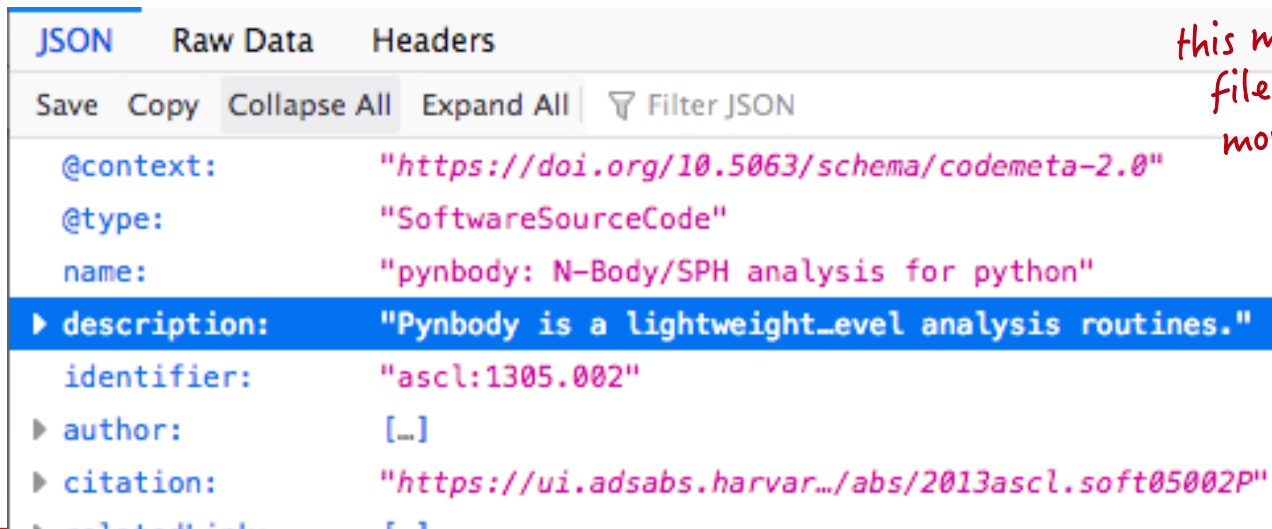
## TIP!

### Create a codemeta.json file for your code to let people know how to cite it

Create a [codemeta.json](#) file to add to your code repo from its ASCL entry by adding /codemeta.json to the URL for an ASCL entry

Example: <https://ascl.net/1305.002/codemeta.json>

This works for code entries with an ASCL ID. These files are intended to be a starting point; please edit the resulting file as needed.



JSON	Raw Data	Headers
Save	Copy	Collapse All   Expand All   Filter JSON
@context:	"https://doi.org/10.5063/schema/codemeta-2.0"	
@type:	"SoftwareSourceCode"	
name:	"pynbody: N-Body/SPH analysis for python"	
▶ description:	"Pynbody is a lightweight...evel analysis routines."	
identifier:	"ascl:1305.002"	
▶ author:	[...]	
▶ citation:	"https://ui.adsabs.harvar.../abs/2013ascl.soft05002P"	

*this machine-actionable  
file can be used for  
more than citation!*

## You might want to know...

### **... that the ASCL downloads and stores archive files of the codes it registers**

When a code is added to the ASCL, we download the software to ensure it is source code. If the code site is an institutional or personal website, we also download some or all of the website, and also push it to the [Internet Archive's Wayback Machine](#).

We do not serve the codes we download to the public unless we have explicit permission from the software author to do so.

## You might want to know...

**... that we perform regular maintenance on our entries**

### Codes not updated since:

Type a date to find percentage of codes not updated since:

7.19% 170 out of 2363

We check the health of our entries through a regular maintenance program to ensure the integrity of our records. We run two different link checkers on our site links several times every week and follow up on those that consistently fail over a period of time. You can see the results of our link checking at the top of our [dashboard](#).

We also look at every entry at least once every three years; this year, for example, we are looking at entries that haven't been updated since 2018 and will update them as needed. This is in addition to maintenance that is triggered by, for example, correspondence with a code author, link checking, and other activities.

## You might want to know...

**... that the ASCL is registered with re3data.org, FAIRsharing.org, and Identifiers.org**



FAIRsharing.org lists the ASCL as a recommended database and source of information. The ASCL ID is recognized and can be resolved by Identifiers.org, and re3data.org provides information about the ASCL to researchers around the world. The ASCL works with other science and research organizations on issues around and related to software, data, research transparency and reproducibility, and credit and citation for software.

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Theoretical Studies



**Michigan Tech**

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[SAO/NASA Astrophysics Data System](#)

[arXiv.org](#)

[Internet Archive](#)