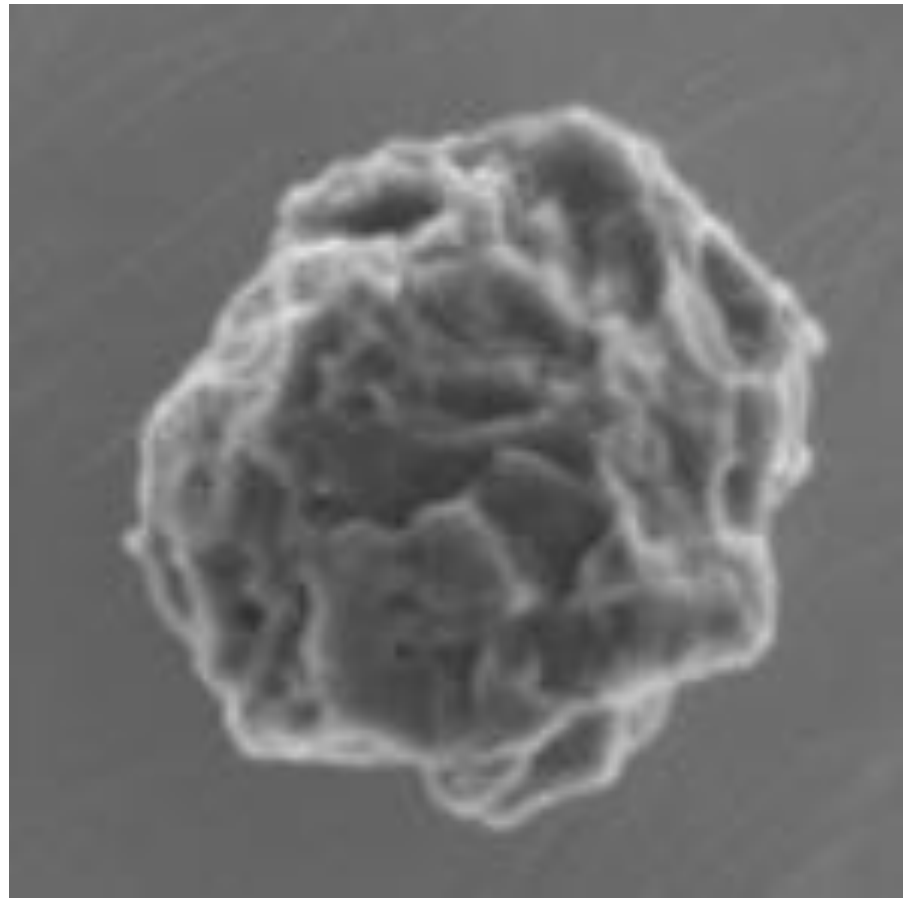
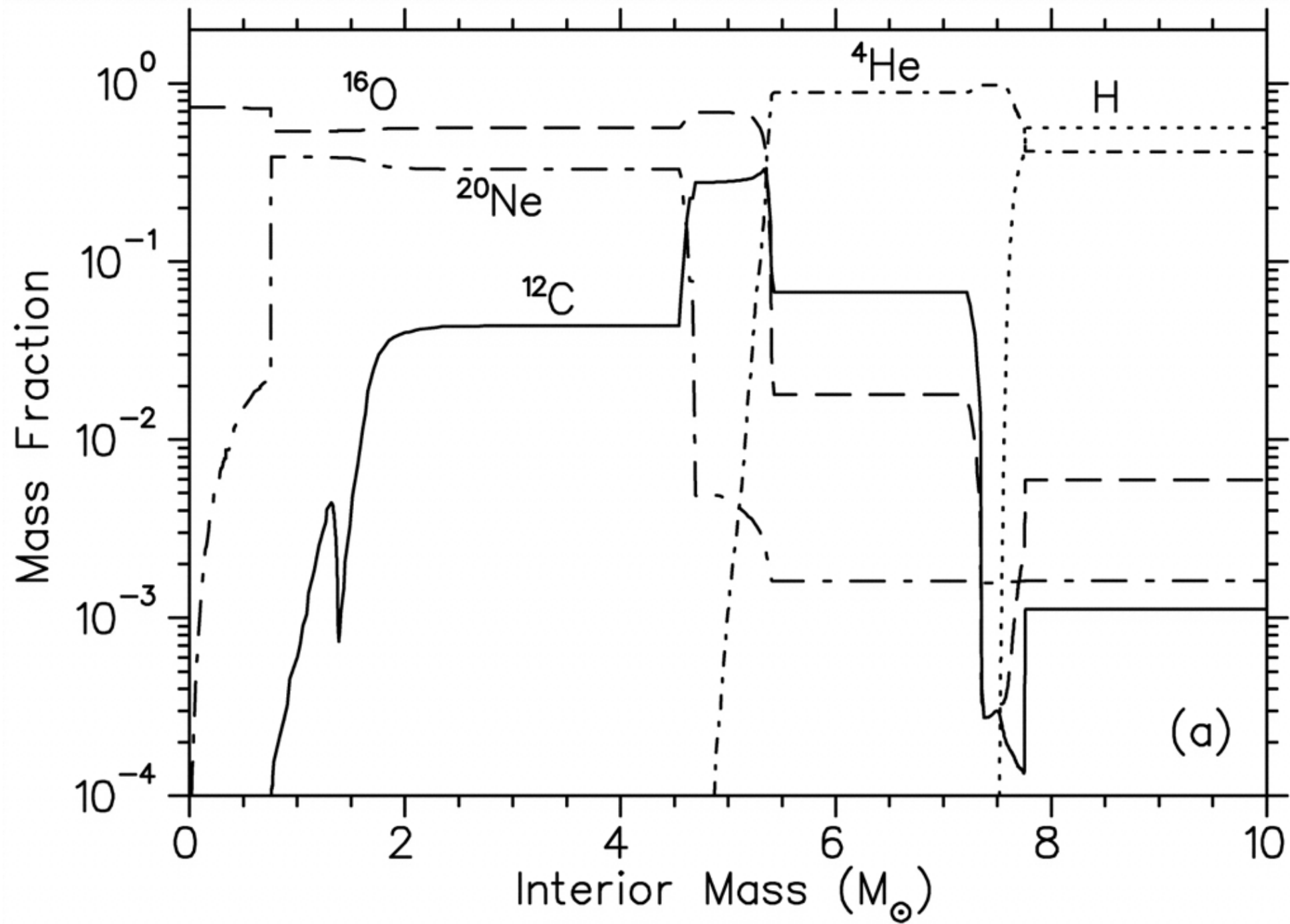


*NucleusHUB.org: A Platform for Collaboration Among  
Astronomers, Nuclear Astrophysicists, and Planetary  
Scientists*

Bradley S. Meyer  
Clemson University





Study of presolar grains requires combined efforts of planetary scientists, astrophysicists, and nuclear physicists.



# NANO *is* HUGE

LARGEST NANOTECHNOLOGY ONLINE RESOURCE

400

simulation tools

1.4M

users

4500

resources

# Welcome to our site!

This project has an **important mission** of revolutionizing scientific research and educational activities.



## FEATURED RESOURCE

[workspace](#) : workspace



## COMMUNITY POLL WHO ARE YOU?

- Graduate student
- Undergraduate student



## FEATURED TOOL

[workspace](#) : workspace

# Categories

## datasets

Spreadsheets and other data related lists that are available for download but don't fit into other categories.

[Browse >](#)

## Documents

Articles, technical reports, theses, and other documents, usually in PDF or DOC format.

[Browse >](#)

## Seminars

A lecture of some sort, usually recorded with voice or video. It may be a graduate or undergraduate level seminar, a lecture for a class, or a tutorial presentation.

[Browse >](#)

## Series

Series are collections of lectures, publications, and other resources presented as a list. Each series is available as a podcast feed.

[Browse >](#)

## Teaching Materials

Supplementary materials (study notes, guides, etc.) that don't quite fit into any of the other categories.

[Browse >](#)

## Tools

Simulation and modeling tools that can be accessed via a web browser.

[Browse >](#)

## Tools (Windows)

A simulation tool is software that allows users to run a specific type of calculation. These are (MS) Windows-based.

[Browse >](#)

## Workshops

A collection of lectures, seminars, and materials that were presented at a workshop.

[Browse >](#)

You are here: Home / Members / Bradley Stewart Meyer

# Bradley Stewart Meyer

Private Profile :: Your profile is currently private.

Add Modules



Dashboard

Profile

Account

Blog

## Dashboard Introduction

Welcome to your customizable dashboard page!

To get started, click the "Personalize" button towards the top of this page. You will then be presented with a list of modules you may add to your page. You may also, at that time, remove any unwanted modules or rearrange the current modules by drag-and-drop!

## My Groups

Recent

All

You are not a member of any groups at this time.

+ New Group

## My Sessions

No active sessions found.

Storage (manage)

No Quota Found

## My Points

## My Projects

## My Tools

Recent

Favorites

All Tools



# Tools: Session: 5

Workspace

Terminate Keep for later

```
Color xterm
mbradle@localhost:~$ whoami
mbradle
mbradle@localhost:~$
```

Color xterm

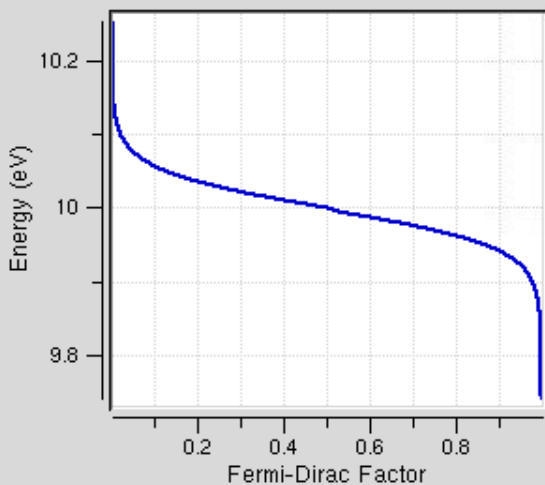
```
mbradle@localhost:~$  
MiddlewareTime: job=  
=0.129981 status=0  
[]
```

File

Simulate

Result: Fermi-Dirac Factor

Ambient temperature:   
Fermi Level:



1 result Clear

```
mbradle@localhost:~/fermi$ cat tool.xml
<?xml version="1.0"?>
<run>
  <tool>
    <about>Press Simulate to view results.</about>
    <command>python @tool/fermi.py @driver</command>
  </tool>
  <input>
    <number id="temperature">
      <about>
        <label>Ambient temperature</label>
        <description>Temperature of the environment.</description>
      </about>
      <units>K</units>
      <min>0K</min>
      <max>500K</max>
      <default>300K</default>
      <preset>
        <value>300K</value>
        <label>300K (room temperature)</label>
      </preset>
      <preset>
        <value>77K</value>
        <label>77K (liquid nitrogen)</label>
      </preset>
      <preset>
        <value>4.2K</value>
        <label>4.2K (liquid helium)</label>
      </preset>
    </number>
    <number id="Ef">
      <about>
        <label>Fermi Level</label>
        <description>Energy at center of distribution.</description>
      </about>
      <units>eV</units>
      <min>-10eV</min>
      <max>10eV</max>
      <default>0eV</default>
    </number>
  </input>
</run>
mbradle@localhost:~/fermi$
```

This tool is one of 4 tools under development on nucleusHub.

**Tool Information edit**

Title	Fermi-Dirac (fermi - id #4)
Version	This version 1.0 (under development)
At a glance	Compute the Fermi-Dirac factor.
Description	<a href="#">Preview</a>   <a href="#">Edit description page</a>
VNC geometry	780x600
Tool execution	restricted to US users (export control)
Source code	open source
Project area	open to public
Development team	mbradle

**Developer Tools**

[History](#) [Wiki](#) [Source](#) [Timeline](#) [Message](#) [Cancel](#)

## What's next?

The nucleusHub team has created the following project area for your tool on the [Forge](#): <https://192.168.216.128/tools/fermi/wiki>

Follow these steps to start using your project area:

[Learn more](#) about uploading source code into your project area and how the directories are arranged

[Learn more](#) About the [Rapture toolkit](#).

When you are ready, [Follow these instructions](#) to access the source code repository for your specific project and upload your code.

## We are waiting for You

Once your source code has been uploaded into your project area, click here to let us know:

[My code is committed, working, and ready to be installed](#)

Remaining steps before we can publish your tool:

[Register your tool on nucleusHub](#)

Commit the final code for this version. [I've done this How do I do this?](#)

[Make the page that describes your tool. Create this page...](#)

Nice opportunity for students to convert existing codes to online resources.

Ultimate disposition: maintained by Joint Institute for Nuclear Astrophysics and/or the Facility for Rare Isotope Beams?

If you build it, will they come?

If they come, will they build it?