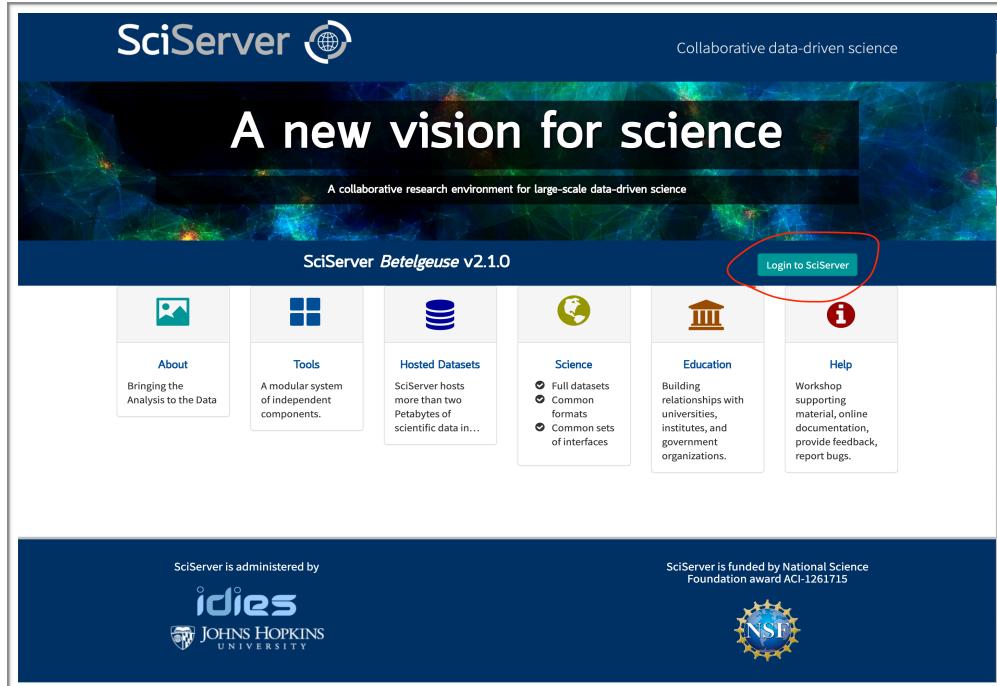
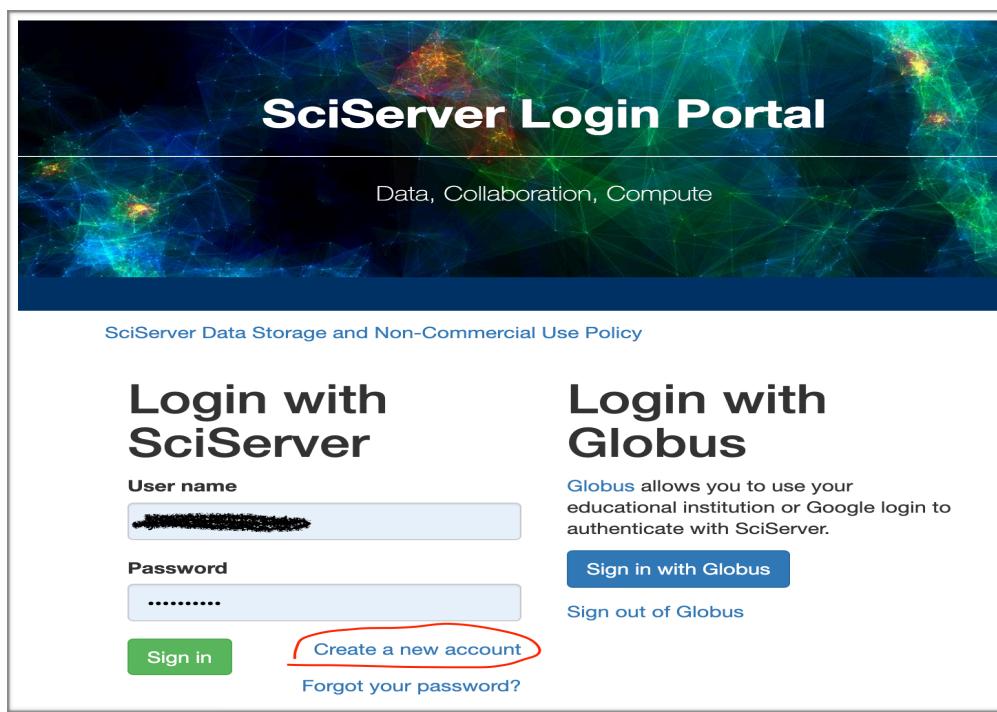


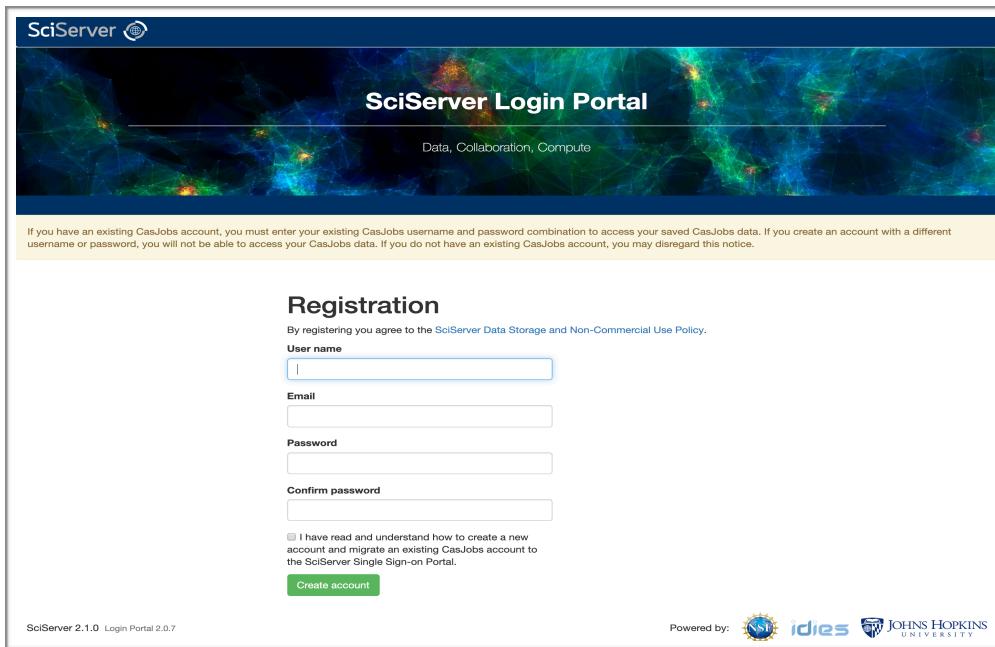
SciServer Tutorial

1. Go to: <http://www.sciserver.org/> & Click “Login to SciServer”



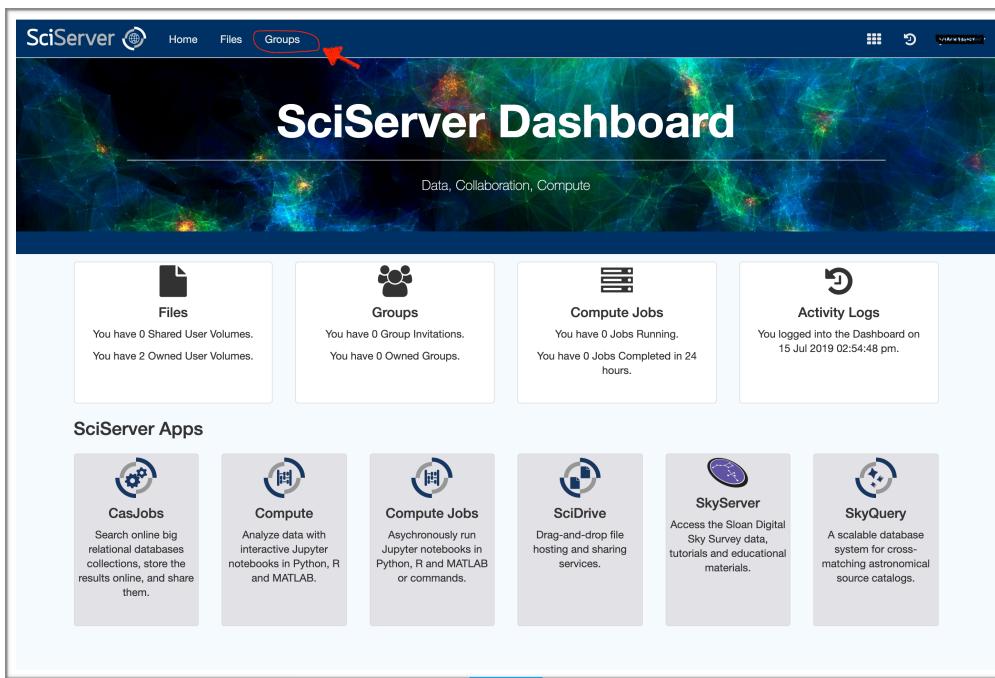
2. Click “Create a new account” if you don’t have one already.





The SciServer Login Portal registration page features a dark blue header with the SciServer logo and a "SciServer Login Portal" title. Below the header is a banner with a green and blue abstract background. A yellow notice bar at the top states: "If you have an existing CasJobs account, you must enter your existing CasJobs username and password combination to access your saved CasJobs data. If you create an account with a different username or password, you will not be able to access your CasJobs data. If you do not have an existing CasJobs account, you may disregard this notice." The main form area is titled "Registration" and includes fields for "User name", "Email", "Password", and "Confirm password". There is also a checkbox for accepting the "SciServer Data Storage and Non-Commercial Use Policy" and a "Create account" button. At the bottom, it says "SciServer 2.1.0 Login Portal 2.0.0" and "Powered by: NSIC idies JOHNS HOPKINS UNIVERSITY".

3. An activation email will be sent to you at the email address you provided during the registration process.
4. Once you have completed the steps above, please send us your “User name”, then we can add you to our group.
5. After we add you to our group, you can see an invitation within Groups on SciServer, you need to accept it. Then you can see the shared “AGN_training” folder



The SciServer Dashboard page features a dark blue header with the SciServer logo and a "SciServer Dashboard" title. Below the header is a banner with a green and blue abstract background. The "Groups" tab is highlighted with a red arrow. The main content area shows four cards: "Files" (You have 2 Shared User Volumes, You have 2 Owned User Volumes), "Groups" (You have 0 Group Invitations, You have 0 Owned Groups), "Compute Jobs" (You have 0 Jobs Running, You have 0 Jobs Completed in 24 hours), and "Activity Logs" (You logged into the Dashboard on 15 Jul 2019 02:54:48 pm). Below this is a section titled "SciServer Apps" with six cards: "CasJobs" (Search online big relational databases collections, store the results online, and share them), "Compute" (Analyze data with interactive Jupyter notebooks in Python, R and MATLAB), "Compute Jobs" (Asynchronously run Jupyter notebooks in Python, R and MATLAB or commands), "SciDrive" (Drag-and-drop file hosting and sharing services), "SkyServer" (Access the Sloan Digital Sky Survey data, tutorials and educational materials), and "SkyQuery" (A scalable database system for cross-matching astronomical source catalogs). A large blue downward arrow is positioned below the dashboard content.

The screenshot shows the SciServer Groups page. A blue arrow points down from the top of the page to the bottom of the first screenshot. On the left, there's a sidebar with 'Groups' and a search bar. In the center, the 'Drexel LSST' group is listed with the description 'Group for LSST work centered at Drexel'. At the bottom, there are 'Accept Invitation' and 'Decline Invitation' buttons.

The screenshot shows the SciServer Groups page after accepting the invitation. The 'Shared Files' section contains a folder named 'AGN_training', which is circled in red.

6. Next, if you want to work with the data on SciServer, you need to start a new container from Compute and mount the shared volume. To access Compute, click the third icon from the right on the top menu and click Compute.

The screenshot shows the SciServer Groups page again. A red arrow points to the 'Compute' icon in the top right corner of the interface. The sidebar and main content area are similar to the previous screenshot.

The screenshot shows the SciServer Compute page. A blue arrow points down from the top of the page to the bottom of the second screenshot. The page has tabs for 'Compute', 'Interactive Notebooks', and 'Jobs'. It displays a message about JupyterLab and Classical Jupyter images. Below is a 'Containers' table with a single row and a 'Create container' button at the bottom, which is circled in red.

Note:

- 1) You need to select Python +R from "Compute Image", (there are a lot of options, not guaranteed that every image has the compatible python version installed).
- 2) The box next to 'AGN_training, Storage Volume created by ywx649999311' under "User volumes" has to be checked, otherwise you won't see the shared files in the Jupyter environment.

Create a new container

Container name
LSST AGN

Domain
Interactive Docker Compute Domain

Shared Intel Xeon E7 systems. All containers are limited to 100GiB of RAM. Unused containers are shut down after 3 days.

Compute Image ?
 (circled)

Python 2.7, Python 3.6, R 3.4, and development tools using the Anaconda Python distribution and R Essentials.

User volumes

AGN_training, Storage Volume created by ywx649999311 (circled)
 persistent, Storage Volume created by ywxtest
 scratch, Temporary Volume created by ywxtest

Data volumes ?

Getting Started
 Ocean Circulation
 Recount
 SDSS DAS

Create

7. Once the container is created, click the name of the container to open up the Jupyter environment in a new browser tab.

Containers					
Created At	Name	Domain	Image	Status	
2019-07-15 15:30:54.0	LSST AGN (circled)	Interactive	Python + R	running	■ ⓘ ✘

Create container

8. Next, navigate to your persistent folder under “/home/ides/workspace/Storage/{username}/“, clone the repository: https://github.com/RichardsGroup/LSST_training.git, and proceed from there. The image below shows the path to Weixiang Yu’s persistent folder, please replace ‘ywx649999311’ with your own SciServer username.

```
[ides@a701dbeccf46 persistent]$ pwd  
/home/ides/workspace/Storage/ywx649999311/persistent
```