# Sprint 2 Plan Astrophysics Visualizer Reagan's Renderers Revision 3

**Goal:** Implement interactive GPU volume rendering and understand how it could be incorporated into yt as a module.

### Task Listing, organized by user story:

As a developer I need to understand the existing method of developing within the yt project so that I can implement OpenGL calls within yt. --21hrs

Task 0: Parse thru blenders.py, create\_spline.py, setup.py and tansfer\_functions.py-3hrs (per person)

Task 1: Make list of relevant subroutines -- 1hr (per person)

Task 2: Order subroutines by relevance to our project and how well you can understand them -- 3hrs (per person)

As an astrophysicist I would like to be able to view volumes generated in yt so that I can interact with my data.--14 hrs

Task 0: Create a simple volume renderer (Possibly from nVidia example)

-- 6hr

Task 1: Integrate volume renderer with yt -- 4hrs (dependent on python modules)

Task 2: Work with VirtualGL to try and optimize video streaming -- 4hrs

As a developer, I need to include a user manual with my software so that users will have a reference guide. --5 hrs

Task 0: Create simple text document with list of files and their functionality. -- 5 hrs

#### **Team Roles:**

Alex: Product owner

Conor: Team DeveloperNathan: Team developer

• John: Team developer / OpenGL specialist / Scrum Master

• Nolan: Team developer / Scrum Master

Nick: Team developer

#### **Initial Task Assignment:**

- Alex: Keep in communication with Yt devs to make volume rendering examples available
- Nolan: Rank relevant subroutines
- Nathan: Rank relevant subroutines
- Nick: Volume Render / Look at yt output
- John: Continue working with VirtualGL optimization.
- Conor: Rank relevant subroutines

## Scrum times:

Mondays 12:00 pm Thursdays 12:00 pm Fridays 1:30 pm --With Linda

# **Burnup Chart:**

