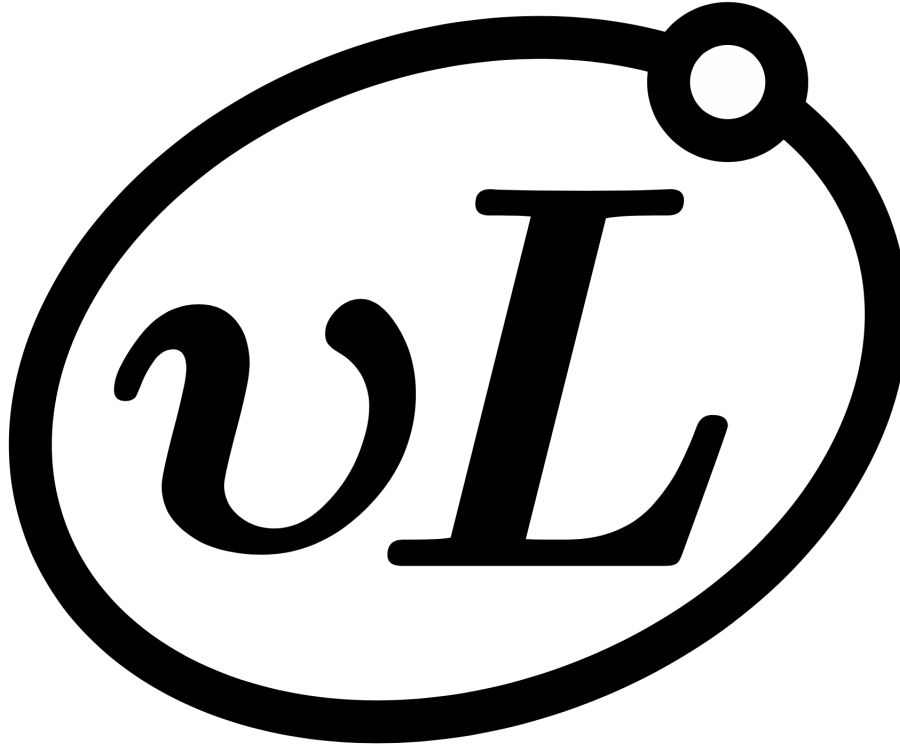


# Upsilon Lab Constitution

an Official UCLA Physics & Astronomy Department Sponsored Organization

as laid by Jacob Saret, Founder-President & Raj Chaklashiya, Founder-President  
on this April 9, 2018



“A lab for undergraduates, by undergraduates.”

## 1 Mission

The mission of Upsilon Lab is to provide undergraduate students in the UCLA Physics & Astronomy department the opportunity to learn valuable skills to succeed in their future endeavors, whether in research, engineering, or other fields.

### 1.1 For Members

To build skills vital to their development as future researchers and technical experts, including equipment and experiment design, programming, data analysis, literature review, and presentations, to make them attractive choices for professor-advised research positions in their upperclassmen years.

### 1.2 For Managers

Enable them to build their leadership, teaching, and mentoring skills as team managers, and public speaking skills when giving technical presentations.

|           |  |           |
|-----------|--|-----------|
| <b>1</b>  | <b>Mission</b>   | <b>1</b>  |
| 1.1       | For Members . . . . .  | 1         |
| 1.2       | For Managers . . . . .   | 1         |
| <b>2</b>  | <b>Branch Organization</b>                                       | <b>3</b>  |
| 2.1       | Tools & Experimental Research (TER) Branch . . . . .             | 3         |
| 2.2       | Theory & Simulation (TS) Branch . . . . .                        | 3         |
| <b>3</b>  | <b>Advertisement: Contract Work for Professors</b>               | <b>4</b>  |
| 3.1       | Experiment Work under the TER Branch . . . . .                   | 4         |
| 3.2       | Theory & Simulation Work under the TS Branch . . . . .           | 4         |
| <b>4</b>  | <b>Organizational Structure</b>                                  | <b>5</b>  |
| 4.1       | Presidents . . . . .   | 5         |
| 4.2       | Team Managers . . . . .  | 5         |
| 4.3       | Team Members . . . . .   | 6         |
| 4.4       | Advisory Board (AB) . . . . .                                    | 6         |
| 4.5       | Organizational Structure . . . . .                               | 6         |
| <b>5</b>  | <b>Member Applications</b>                                       | <b>7</b>  |
| 5.1       | Order of Review . . . . .  | 7         |
| 5.2       | Application Eligibility Requirements . . . . .                   | 7         |
| 5.3       | Safety Training . . . . .  | 7         |
| 5.4       | Application Cost . . . . .                                       | 7         |
| 5.5       | Response Window . . . . .  | 7         |
| 5.6       | Anti-Discrimination Statement . . . . .                          | 7         |
| <b>6</b>  | <b>Selection of New Officers</b>                                 | <b>8</b>  |
| 6.1       | Presidents . . . . .   | 8         |
| 6.2       | Team Managers . . . . .  | 8         |
| <b>7</b>  | <b>Certification of Participation for Members &amp; Managers</b> | <b>8</b>  |
| <b>8</b>  | <b>Funding</b>   | <b>8</b>  |
| 8.1       | Project Funding . . . . .  | 8         |
| 8.2       | Professor Sponsorship . . . . .                                  | 8         |
| 8.3       | Provision to Make Financial Records Available . . . . .          | 8         |
| <b>9</b>  | <b>Quarterly Reports</b>   | <b>9</b>  |
| <b>10</b> | <b>Member &amp; Officer Dismissal</b>                            | <b>9</b>  |
| 10.1      | President . . . . .  | 9         |
| 10.2      | Team Managers . . . . .  | 9         |
| 10.3      | Team Members . . . . .   | 9         |
| <b>11</b> | <b>Administrative Miscellany</b>                                 | <b>9</b>  |
| 11.1      | Duration of Operation . . . . .                                  | 9         |
| <b>12</b> | <b>Amendments &amp; Temporary Addenda</b>                        | <b>10</b> |
| 12.1      | Temporary Addenda: Amendments in the First Year. . . . .         | 10        |
| 12.2      | Temporary Addenda: Team Managers in the Second Year. . . . .     | 10        |

## 2 Branch Organization

Upsilon Lab is a Physics & Astronomy department-sponsored organization. It is composed of two branches, with each branch having numerous teams of approximately seven, with each manager leading one team of five or more members. The maximum size of each branch is only limited by the number of team managers, how many members they wish to have on their team, and the amount of available contract work. The branches of Upsilon Lab and their responsibilities are as follows:

### 2.1 Tools & Experimental Research (TER) Branch

The primary goal of the TER Branch is to teach branch members relevant skills useful for work in experimental professor-advised labs through the completion of contracted experimental research. At any given time, work for the members and managers of the TER Branch will include:

- Designing, building, or otherwise sourcing equipment to be used in their experiment.
- Performing experimental research to obtain relevant data.

If there is no work as outlined above for any team of the TER Branch, the manager will work with their team members to create an original research proposal, including working with the TS Branch to analyze their proposal as needed, and execute the task as outlined above. Any such “in-house” project will be put on hold if any contract work becomes available. Team managers should always ensure that all work will contribute towards the goal of Upsilon Lab, including work which may be useful for future experiments, teaching team members skills that may be useful in future contract work, etc. Members and managers in the TER Branch working in a laboratory setting **must have a current lab safety certificate**, and all others are **highly encouraged**.

### 2.2 Theory & Simulation (TS) Branch

The primary goal of the TS Branch is to teach branch members relevant skills useful for work in theoretical professor-advised groups through the completion of contracted theory and simulation work. At any given time, work for the members and managers of the TS Branch will include:

- Writing programs to simulate physical phenomena for research purposes.
- Analyzing their simulations to glean physical meaning.
- Analyze data without direct involvement with an experiment.

If there is no work as outlined above for any team of the TS Branch, the manager will work with their team members to create an original research proposal and execute the task as outlined above. Any such “in-house” project will be put on hold if any contract work becomes available. Team managers should always ensure that all work will contribute towards the goal of Upsilon Lab, including work which may be useful for future simulations and theory work, teaching team members skills that may be useful in future contract work, etc. Members and managers in the TS Branch are **highly encouraged** have a current lab safety certificate.

### 3 Advertisement: Contract Work for Professors

All professors of the Physics & Astronomy department are encouraged to contact the presidents of Upsilon Lab to provide our teams with research work. Upsilon Lab specializes in experimental design and research under the Tools & Experimental Research (TER) Branch, and theory and simulation under the Theory & Simulation (TS) Branch.

Teams can perform experiment or theory work your group may wish to pursue but lack time, execute grant proposals for your research including all the writing, literature, and background research, or any other work during which they can learn skills that would make them attractive to **you**.

#### 3.1 Experiment Work under the TER Branch

Teams in the TER Branch specialize in designing experimental setups, building tools and equipment to use in experiments, and executing those experiments. Teams also work on grant proposals, including the literature research on both the grant itself and current state of research, as well as setting up and performing the requisite experiment to generate sample data as needed for proposals.

#### 3.2 Theory & Simulation Work under the TS Branch

Teams in the TS Branch specialize in designing computer simulations and performing literature research to generate original ideas about theory. Teams also work on grant proposals, including the literature research on both the grant itself and current state of research, as well as setting up simulations and researching the requisite theory to generate sample simulations as needed for proposals.

## 4 Organizational Structure

There will be an organizational structure of all members of Upsilon Lab as laid out here.

### 4.1 Presidents

There will be two presidents at any given time. Each president must be an upperclassman PA department major who has been a team manager of any branch of Upsilon Lab for one full year, prior to taking office. The presidents' duties for the academic year will include:

- Soliciting professors for research contracts to provide work to the various branches as needed.
- Bringing on new managers, as detailed in Section 6.
- Ensuring managers are running their teams appropriately- to ensure productivity *and* enjoyment. This includes regular meetings with all team managers, and individuals as needed.
- Remediating any situation in any team in Upsilon Lab, up to and including removal of team managers and members acting inappropriately or preventing others from realizing their maximum potential or work towards their goals.
- Maintaining good rapport with the officer board of other PA department organizations.
- Approving budgets from team managers for teaching and in-house purposes.
- Writing the Quarterly Reports at the end of each academic term.
- Bringing on administrative staff as necessary, such as a webmaster.
- Making amendments to the constitution as they deem necessary, as outlined in Section 12.

### 4.2 Team Managers

One team manager is required for every approximately five members of a team. A team manager of any branch must be an upperclassman PA department major who has been a member of the same branch of Upsilon Lab for one full year prior to taking office. A team manager's duties will include:

- Discussing with other managers in their branch how to best divide contract work.
- Providing their team with interesting tasks in the absence of contract work.
- Outlining a budget for all necessary equipment for their project and ordering the equipment through the Physics & Astronomy Department, or the sponsoring professor for their project.
- Working with the other managers in their branch to handle applications of prospective members as they see fit, as described in Section 5.
- Guaranteeing the members of their team are fulfilling their duties and learning skills relevant to and valuable for future research in a professor-advised lab or group.
- Organizing Physics & Astronomy Department-wide workshops open to teach necessary skills. Managers may bring on nonmembers to teach these workshops with the president's approval.
- Organizing open sessions where their teams present on the progress of their projects to the Physics & Astronomy Department
- Working with their teammates to move towards their, their team's and Upsilon Lab's goals.
- Ensuring they themselves are learning skills relevant to and valuable for future leadership in industry, academia or any other such line of work.

### 4.3 Team Members

A member of Upsilon Lab must meet the eligibility requirements detailed in Section 5.2. A team member's duties will include:

- Working with their teammates and team manager to move towards their, their team's, and Upsilon Lab's goals.
- Ensuring they are learning skills relevant to and valuable for future research in a professor-advised lab.

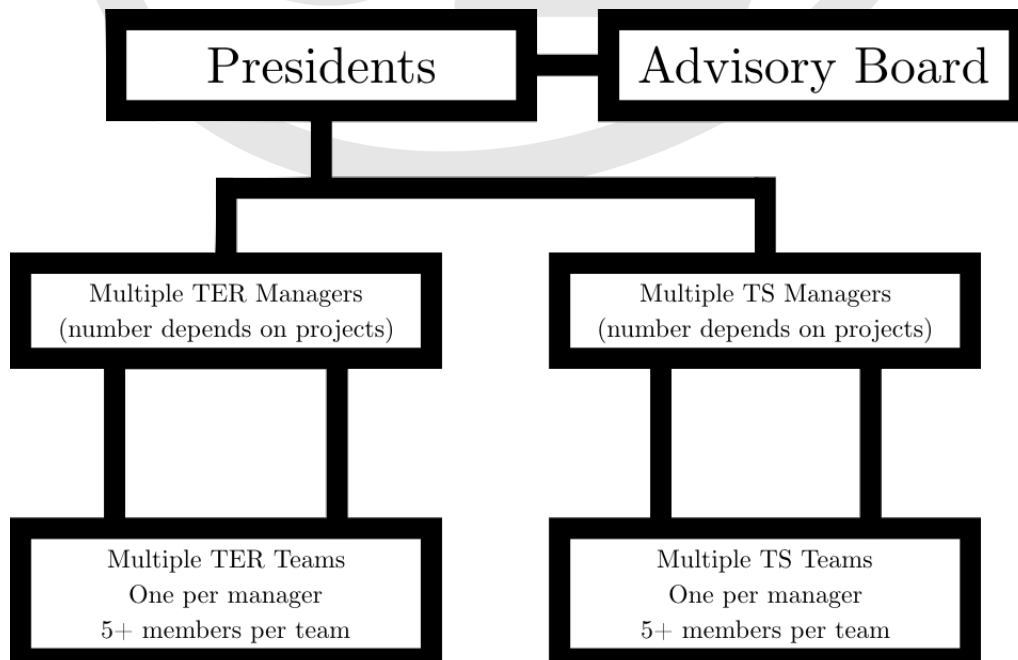
### 4.4 Advisory Board (AB)

The Advisory Board will provide advice to the presidents for the organization and execution of Upsilon Lab activities. Members of the Advisory Board are faculty from the UCLA Physics & Astronomy Department, and the two Founder-Presidents. The Physics & Astronomy Department Chair is by default a member of the Upsilon Lab Advisory Board.

- Time commitment for AB members will be minimal.
- AB meetings will be infrequent and only when necessary.
- AB meetings are organized by the president, where they will provide updates to Advisory Board members on Upsilon Lab activities.
- AB members in turn will provide advice to the president.
- AB members are encouraged to bring potential funding opportunities to the president.

### 4.5 Organizational Structure

The organizational structure of Upsilon Lab is shown in the figure below.



## 5 Member Applications

The applications for team member positions will be submitted to the collective team managers of Upsilon Lab via the official application form on the Upsilon Lab website. Applications will be accepted on a continuous basis throughout the entire calendar year. Review will take place only from Week 0 of Fall Quarter throughout Spring Quarter.

### 5.1 Order of Review

Applications are processed in the order they are received without exception. Members will be directly notified of openings on any project they marked on their application form, or similar projects if the catalog of active projects changes. This may result in members being placed out of order, but all applicants **will eventually be placed** in a team listed on their applications or similar.

### 5.2 Application Eligibility Requirements

Applicants **must meet all four** of the following eligibility requirements:

- Have freshman, sophomore, junior, or first-year transfer student standing, and
- Be declared/intend to declare as a physics, astrophysics, or biophysics major.

### 5.3 Safety Training

The requirements regarding lab safety trainings for potential members is outlined in each subsection of Section 2. Applicants can inquire with any team manager of their branch of interest regarding the requirements for their application to be considered. Applicants are encouraged to bring their own research ideas when applying.

### 5.4 Application Cost

The Upsilon Lab application will have no cost to any applicant.

### 5.5 Response Window

Membership offers will be made to the email listed on the application form only. Applicants are expected to reply within five (5) business days of receiving an offer from a manager, and begin work promptly. If the offering manager does not receive a response from the accepted applicant, their application will be withdrawn and they will need to reapply without priority.

### 5.6 Anti-Discrimination Statement

New members will be accepted into a team at the discretion of the team manager, with regards to team size constraints only, i.e. there will be no discrimination based upon race, color, national origin, religion, sex, physical and mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized).

## 6 Selection of New Officers

The Upsilon Lab officers of the following year will be determined by the officers of the current year in the manner laid out in the following subsections.

### 6.1 Presidents

Both new presidents will be selected from the pool of eligible managers (Section 4.1) during late Winter Quarter. They will serve under the incumbent presidents for the following Spring Quarter as a training period. They are expected to continue their regular manager duties during this time.

### 6.2 Team Managers

The incumbent presidents will draft new team managers meeting the qualifications laid out in Section 4.2, as the amount of available contract work and membership applications necessitate.

## 7 Certification of Participation for Members & Managers

The official record of participation of all members and managers of Upsilon Lab is the listing of their name in each Quarterly Report encompassing the quarters for which they were active, as detailed in Section 9. All published Quarterly Reports will be made available on the official Upsilon Lab website.

## 8 Funding

Upsilon Lab is currently funded and sponsored by the UCLA Physics & Astronomy Department. It is the responsibility of the Presidents and Advisory Board to suggest or seek other funding sources for Upsilon Lab, as needed.

### 8.1 Project Funding

Funding will be provided for:

- Reusable materials for teaching skills to Upsilon Lab members.
- In-House projects.

### 8.2 Professor Sponsorship

Upsilon Lab funds will not be made available to Professor-Sponsored projects. It is the responsibility of the sponsoring professor to provide all necessary equipment. If a sponsoring professor takes on an existing in-house project, they will reimburse the Upsilon Lab fund for all materials associated with the project.

### 8.3 Provision to Make Financial Records Available

We will make financial records available to university administrators upon request.



## 9 Quarterly Reports

The presidents will publish a Quarterly Report at the end of every academic quarter. The content will include, at minimum:

- A summary of the highlights of the activities throughout the quarter,
- A roster of the projects active during the quarter and membership statistics,
- A summary of non-project highlights,
- A list of projections for the following quarter,
- A description, summary of activities, progress, and a membership roster for each project, and
- A roster of the projects to be active during the following quarter.

## 10 Member & Officer Dismissal

Upsilon Lab takes member and officer conduct seriously. If any member or officer is behaving inappropriately or refuses to fulfill their duty, they can be relieved of their position in the manner described below. All officers and members are encouraged to come to the president if they have any concerns about any other member or manager.

### 10.1 President

If one president finds the conduct of the other inappropriate, they may call for a dismissal vote. If two-thirds of the board, excluding the other president, vote to dismiss, then the remaining president will select a new counterpart immediately from the pool of managers meeting the qualifications in Section 4.1.

### 10.2 Team Managers

A team manager can be dismissed at the presidents' discretion. Another manager can absorb the dismissed manager's team, at their discretion upon the presidents' request. If none elect to do so, another qualified (4.2) non-manager member can be chosen by the president from within the branch.

### 10.3 Team Members

A team member can be dismissed at the presidents' discretion. Usually, this will be at the member's team manager's advisement.

## 11 Administrative Miscellany

### 11.1 Duration of Operation

Upsilon Lab will operate only during the academic year: Fall, Winter, and Spring terms excluding breaks, as dictated by the official UCLA Academic Calendar.

## 12 Amendments & Temporary Addenda

Amendments and temporary addenda must be proposed by one president, then approved by the other before being voted upon by the current team managers with a two-thirds vote. The effective dates of temporary addenda are to be included in the vote.

### 12.1 Temporary Addenda: Amendments in the First Year.

EFFECTIVE DATES: JAN. 1, 2018 TO JUN. 15, 2018 INCLUSIVE

If both Founder-Presidents agree to make any amendment, or add any temporary addendum to the constitution, they may do so without approval from the manager collective as detailed in the heading of Section 12.

### 12.2 Temporary Addenda: Team Managers in the Second Year.

EFFECTIVE DATES: SEP. 24, 2018 TO JUN. 14, 2019 INCLUSIVE

Team Managers active during the 2018-2019 academic year need have been an active member of Upsilon Lab for only one quarter before taking a manager position.

