



"Approved by" LEPL Samtskhe-Javakheti State University Academic Board Decree # № 14, 24.02.2022 წ.

# The Provision of the PhD Program of Astronomy and Dissertation Board of LEPL Samtskhe-Javakheti State University Faculty of Engineering, Agrarian and Natural Sciences and LEPL E. Kharadze Georgian National Astrophysical Observatory

# Article 1. General provision

1.1 The provision regulates the implementation procedures of the joint PhD program of Astronomy (hereafter PhD program) by faculty of Engineering, Agrarian and Natural Sciences of the LEPL Samtskhe-Javakheti State University (hereinafter "University") and E. Kharadze Georgian National Astrophysical Observatory (hereafter Observatory) and awarding of the PhD academic degree in accordance with Law of Georgia on Higher Education, other normative acts and LEPL Samtskhe-Javakheti State University bylaw

# Article 2. A Doctoral Program

- 2.1. Doctoral Program- the third level education programme of higher academic education, a combination of a study and scientific-research components, which aims to train a scientific staff and award an academic degree of Doctor.
- 2.2. Doctoral Program of Astronomy is implemented by the faculty Engineering, Agrarian and Natural Sceinces of the University and Observatory.
- 2.3 Supervisor of the doctoral programme:

The doctoral programme, due to its specifics, can have one or several supervisors. The doctoral programme supervisors can be professors or associated professors of the University having relevant qualification. The doctoral programme can also be supervised by an invited person with relevant academic degree or qualification. In this case, apart from the invited person, the doctoral programme should also be supervised by a professor or an associated professor of the University having relevant qualification;

The doctoral programme supervisor coordinates the process of writing a curriculum, that is participated by people involved in the program implementation, specialist in the relevant field, doctoral student's

scientific supervisors; he/she also guarantees the publicity and transparency of the process of writing a curriculum;

The doctoral program supervisor shall be informed about the results of internal and external assessment, technical monitoring and academic expertise and is obliged to respond on them in order to make the programme perfect;

The doctoral program supervisor's duties are: to inform students about the curriculum, to give consultations together with the doctoral student's scientific supervisors in order to plan the student's study and research components optimally, to deal with organizational issues connected with programme implementation, to participate in doctoral seminars together with the doctoral student's scientific supervisors, to do monitoring of implementing study and research components of the doctoral students participating in the programme etc

- 2.4. The doctoral student is a person who is studying for a Doctoral Studies.
- 2.5 A PhD program student a person having the academic degree that is awarded to a person after completing components withing the Doctoral Programand defending the dissertation
- 2.6. The aim of the Doctoral Programis:

To prepare staff on the basis of knowledge built on academic freedom (that is done in democratic academic society) and to support their integration in free international academic space.

# Article 3. Right of Admission to the Doctoral Program

- 3.1. The person holding the Master's degree in Astronomy, Astrophysics or mathematics or with an equal academic degree whose diplomas are approved by the state has the right to study for a doctorate in Astronomy.
- 3.2 According to Article 50 of the Law of Georgia on Higher Education the right to study for a doctorate can be granted to a graduate of the master program of foreign university by the specialty of Astronomy, Astrophysics, physics or mathematics
- 3.2. A person with student mobility has the right to study for a doctorate.

# Article 4. Enrollment in Doctoral Program

- 4.1. A doctoral candidate is required to have at least a B2 level of English.
- 4.2. A doctoral candidate who wants to study for doctorate at the university and whose native language is not Georgian, is required to have at least a B2 level of Georgian. He/she must submit a B2 level certificate of Georgian language proficiency (if any), or Georgian Bachelor`s or Master`s Diploma, or a Georgian language test is required (listening, reading, speaking, writing).
- 4.3. Additional requirements may be set according to the doctoral programme.

# Article 5. Procedures of enrollment in Doctoral Program

- 5.1. Dissertation board defines the students to be admitted on the program, the terms of the examination, composition of the examination commission, format of the examination and submits to the faculty board for submission to the academic board of the university.
- 5.2 Admission to the doctoral program takes place based on the competition
- 5.3 The doctoral candidate submits an application (filled application form) on behalf of the university Rector together with the following:
- a) Autobiography (CV);

- b) A notarized copy of Master's diploma and the diploma of Master's degree or equivalent; for the graduates of a foreign higher education institution document on recognition of foreign education issued by LEPL National Center for Educational Quality Enhancement;
- c) Doctoral research application;
- d) Copy of ID card (Passport);
- e) Photograph (3X4) together with an electronic copy;
- f) Certificate documenting the knowledge of the English Language at B2 Level (if any) and its copy;
- 5.4 The candidates who do not submit a certificate of knowledge of the English Language at B2 Level and foreign candidates who do not submit a certificate documenting the knowledge of the Georgian Language at B2 Level, had to pass exam in language. The exam shall be held by the University examination center.
- 5.5 After submitting certificates documenting the knowledge of the English/Georgian Language at B2 Level, or successful passing of the exam, a competitive exam is held in specialty.
- 5.6 University Rector, the doctoral student and scientific supervisor sign an agreement within two months from the date of enrolment, which determines the duties of all parties. The doctoral student's individual plan is a part of the agreement. The doctoral student prepares the individual plan together with the scientific supervisor (in accordance with the doctoral Programme), which is based on the specifics of the doctoral student's dissertation thesis, relevant field and doctoral Programme, as well as the doctoral student's academic experience.
- 5.7. The doctoral student's scientific supervisor supervises the fulfillment of the dissertation thesis and the individual plan.
- 5.8 In case of termination authority to the scientific supervisor's (Expiration of the employment contract, death etc.), The university must allocate another supervisor to the doctoral student.

## Article 6. The Structure of the Doctoral Program

- 6.1 The faculty announces enrollment in the Doctoral Programat the doctoral program mentioned in Paragraph 2.2.
- 6.2 The duration of the doctoral education programme is at least 3 years and its study component includes at least 50 credits

## 6.2.1 *The study component:*

The study component of the doctoral Programme contribute to the mastery of the branch of the doctoral student. The study components of the doctoral Programme supports the doctoral student in writing a dissertation, prepares him/her for future academic and research activities. The study components of the doctoral Programme includes compulsory and elective parts: professor`s assistance, seminar and learning courses;

## Professor`s assistance – 10 credits

Assistance means doctoral student's involvement in professor's activities, gaining the skills that will support to working at academic field successfully. It includes participation in the activities like: working group, conducting practical training or attending/participating in seminars, preparing topics and tests for midterm and final exams, checking students' papers, preparing learning resources, reviewing a bachelor's and master's thesis, conducting a demonstration lecture. Assessment of professor's assistance

is done on the basis of the report on the work performed prepared by the doctoral student. Prerequisite for getting credits in professor's assistance is a positive evaluation of the work performed according to the criteria prepared by a professor who the doctoral student assisted.

#### • Seminar - 15 credits

The faculty of Engineering, Agrarian and Natural Sciences in agreement with the secretary of the Faculty Board organizes seminar. Interdisciplinary and interfaculty seminars can also be held. Seminar is not a part of a dissertation. Participants of the doctoral seminar present speeches on the actual issues of the related field, on the modern conditions of the various scientific problem research that is followed by a discussion. Working process of the doctoral seminar is participated by supervisors of the doctoral Programme, supervisors of the dissertation and the doctoral student. The doctoral student prepares speeches for conferences of various levels. He/she gets consultation from the supervisor about the structure of speeches, actuality of the problem, logical order etc. The speeches are presented to people interested in the research of these issues.

## 6.2.2 Research component:

Preparation and defence of the dissertation.

The doctoral student completes the dissertation in accordance with the individual plan. After having discussed and agreed with the supervisor, he/she presents report about the on-going process of working on the dissertation at the end of each term. The dissertation is considered complete if tits objectives are met, there are shown stated results of theoretical and experimental research. The dissertation must be unique scientifically and should contribute to the field development. Time of the dissertation completion and submitting can be extended if necessary, by decision of the dissertation Board and the Faculty Board request. After gathering credits provided for by the learning component, the doctoral students who complete the research component specified in this provision, shall submit and defend the dissertation according to applied rules.

## 6.3 Recognition of the credits

6.3.1 Recognition of credits received in the study component (learning course/courses, professor's assistance, seminar) in other accredited higher education institution of Georgia and accredited higher education institution of a foreign country, is done in accordance with the Georgian legislation.

# Article 7. Suspension and termination of a doctoral student status

- 7.1 The doctoral student status suspension is done according to the rules established by the university;
- 7.2 The doctoral student status can be terminated by the decision of the Dissertation Board:
  - In cases of confirmation of plagiarism or falsification of data;
  - For failure to comply with the terms of the agreement between the University, scientific supervisor and the doctoral student;

## Article 8. Dissertation Board and its Functions

## 8.1 The Structure of the Dissertation board

8.1.1 The Dissertation board of the Faculty of Engineering, Agrarian and Natural Sciences of LEPL Samtskhe-Javakheti State University is composed of all the professors and associate professors in the relevant field/specialty and scientific staff with the Doctor degree of Kharadze National Astrophysical Observatory.

The board may include the representatives of the respective field both from Georgia and abroad. The composition of the board shall be agreed with the scientific board of the observatory, implementing faculty board submits to the university academic board for approval.

- 8.1.2 The Chairperson of the Dissertation Board is elected from the Board members for a period of 4 on the first session.
- 8.1.3 The Chairperson of the Dissertation Board is elected from the Board members for a period of 4 on the first session.
- 8.1.4 Before the dissertation defence, the Dissertation Board creates a sectoral board.

#### 8.2 Dissertation Board functions:

- 8.2.1 Dissertation Board is authorized in case if it is attended by more than a half of the Board members.
- 8.2.2 Decision on the Dissertation Board meeting is made according to the majority of the participant's votes.
- 8.2.3 Dissertation Board meetings are held as necessary.
- 8.2.4 The Chairperson of the Dissertation Board convenes meeting as per his/her own initiative, due to suggestion made by the Dissertation Board secretary, doctoral Programme supervisor or at least three members of the Dissertation Board

#### 8.2.5 Dissertation Board:

- Appoints a Chairperson of the Board;
- Appoints a Dissertation Board secretary;
- Approves the topic of the PhD student dissertation;
- Approves the PhD student's scientific supervisor and individual plan;
- Makes decision on the change of the PhD student's topic and scientific supervisor;
- Makes decision on withdrawal of the academic degree of Doctor in case of academic misconduct;
- Approves instructions for technical data of the dissertation;
- Approves Doctor's degree;
- Performs other functions defined by the relevant decree of the Academic board and these provisions.

## **8.2.6** The Chairperson of the Dissertation Board:

- Convenes the Dissertation Board meetings;
- Organizes the Board decision making process;
- Supervises the fulfillment of the Board decision;
- Signs the Dissertation Board decision;

The authority of the Dissertation Board Chairperson shall be terminated ahead of schedule in the following cases:

- Personal statement:
- By the decision of majority of the Dissertation Board members, if the Board Chairperson fails to perform duties;
- If he/she has been found guilty and sentence passed by the court gets into force;
- If the court declares him/her disabled or handicapped.

## 8.2.7 Secretary of Dissertation Board:

- Secretary of Dissertation Board:
- Secretary of Dissertation Board is appointed by the Dissertation Board from the Board members after being nominated by the Chairperson;
- The secretary ensures organizational activities of the Dissertation Board;
- Prepares minutes of the Dissertation Board meetings in accordance with the general rules on office work at the university.
- Manages the Board Archive and office work;
- Give consultations and support to the doctoral student in preparing relevant documentation before after the dissertation defence.

## 8.3 Sectoral Collegium:

- 8.3.1 Sectoral collegium consists of no less than 5 members (generally, number of collegium membership should be odd);
- 8.3.2 Scientific supervisor and reviewers participate in the collegium with the voting right;
- 8.3.3 Sectoral collegium is leaded by the chairperson of the collegium who is elected by the collegium with the majority of votes;
- 8.3.4 Sectoral collegium choses a secretary after being nominated by the Chairperson of the collegium;
- 8.3.5 Sectoral collegium members must be professors or associate professors of the relevant field. Professors or associate professors from other universities and a person with doctor's academic degree can also be members of the Sectoral Collegium

# Article 9. The scientific supervisor of a doctoral program student

- 9.1. Dissertation Board provides the doctoral student with a supervisor. Apart from that, the doctoral program student has possibility to choose a scientific supervisor himself/herself.
- 9.2. The faculty professor, associate professor, main or senior scientific staff of the observatory, an invited professor, an associate professor from other university or a researcher holding doctor's academic degree can become the doctoral program student's scientific supervisor. The co-supervisor can also be appointed together with a supervisor (one of the supervisor/co-supervisor shall be from the university or observatory).
- 9.3 The scientific supervisor has to have the experience in researching of the field linked to the doctoral student's dissertation topic (the works shall be published in high rated scientific journals);
- 9.4. The scientific supervisor supervises fulfilment of the individual plan by the doctoral student, supports to independent work on the research topic;
- 9.5. Based on the grounded statement of a student it is acceptable to change the topic of the dissertation and/or a supervisor at any stage of the doctoral program.
- 9.6. Dissertation board decides the issue of changing scientific topic and scientific supervisor of the

#### doctoral student

## Article 10. Dissertation

10.1 The dissertation is a scientific paper that is written by the doctoral student to obtain the academic degree of Doctor, should reflect the substantiated results of the doctoral student's individual scientific research and create new knowledge, should contribute to the development of the field and meet the following requirements:

- It must be written in Georgian;
- Number of pages of the dissertation must be 100-110 pages except annexes and reviews;
- It must include: the introduction and conclusion (no more than 1/3 of the total length) and the research part (no more than 2/3 of the total length), and the list of literature used;
- Must be written in Sylfaen, font size 12, interval between the lines -1,5; page margins: 3 cm left sides, 1,5 cm on the right, 2,5 cm- at the top and bottom.

# Article11. Preliminary discussion of the dissertation

11.1 When the doctoral student completes the dissertation, the supervisor submits the conclusion. In the conclusion, together with joint assessment, it should be mentioned that the dissertation can admitted to the public discussion. In case of the scientific supervisor's positive conclusion, through his/her mediation, the dissertation and the dissertation abstract are passed to the Programme supervisor for discussion. The Programme supervisor passes the dissertation to the Plagiarism Detection Commission of Samtskhe-Javakheti State University. In case of confirmation of plagiarism, the work will not be given progress. If there is no plagiarism, the program supervisor in agreement with the supervisor of the dissertation topic, passes the paper to the relevant field professor or associated professor for the preliminary conclusion. In order to evaluate the dissertation, the Programme supervisor can invite a person holding the Doctor's academic degree in the relevant field. In the submitted conclusion apart from other issues, the following should be paid attention: actuality of the dissertation topic, scientific innovation, methodology, doctoral student's role in solving the problems the field face to. Apart from the above mentioned, after going through the scientific papers published by the doctoral student, the author of the preliminary conclusion must point out how the main content and findings are reflected in the scientific papers. The Programme supervisor must hold discussion on the dissertation within 1 month from the date of receiving the paper.

11.2 The preliminary discussion of the dissertation is held at the joint meeting of the Faculty and observatory, which is attended by the field specialists. The program head or co-head leads the session. A secretary is chosen to write minutes of the meeting. The supervisor of the doctoral education Programme, a scientific supervisor, the field professors and associate professors, main and senior scientific staff, and in case of need invited specialist participate in the meeting with the decisive voting right. A doctoral program student has to submit the preliminary summary on the dissertation paper at least three days prior the meeting. At the meeting, the summary is heard by the scientific supervisor of a student, the conclusion of the evaluator of the dissertation paper, as well as response of a student on the feedback made on the summary. Because of the discussion, the decree about submission of the dissertation paper to the dissertation board is taken. In case if the dissertation is not considered to be

given further progress, the dissertation is given back to the doctoral student for considering the mentioned notes. The discussion on the dissertation can be held only 2 months later. The proceedings of the preliminary discussion and the decision made is recorded in the minutes of the meeting that is signed by the Programme supervisor and the secretary.

# **Article12.** Preparation for the defence of the dissertation

- 12.1 For the defence of the dissertation the following materials and documents shall be submitted to the dissertation board:
- a) The statement issued by the faculty about the completion of the study component, accumulated credits and full completion of the semesters;
- b) The conclusion written by the Plagiarism Detection Commission of Samtskhe-Javakheti State University;
- c) Electronic and a printed version of the dissertation abstract (in Georgian and in English);

The dissertation abstract must contain the following information:

- General description of the dissertation;
- Importance of the research topic;
- The goal of the research
- ❖ Scientific novelty;
- Practical importance of the paper;
- \* Requisites of the preliminary review minutes;
- Brief summary of the paper;
- List of published articles referred to the dissertation topic;
- d) Electronic version and four printed copies of the dissertation;
- e) A substantiated conclusion of a students' supervisor;
- f) Before the defence of the dissertation a student has to publish, at list three scientific publications related to the research field, out of those at two shall be published in the international reviewable journals, where it shall be the first author and referred by Scopus or/and Claryvate analytics, with higher than 1 impact factor/CiteScore/

During submission of the published scientific articles, it is required to present the cover page, content and the copy of the article written by the author; In case of submission of the scientific paper into internet publication, it is required to indicate the address of the Internet publication, the front page of the internet edition, table of contents and print-out of the article. The Dissertation Board shall separately discuss the recognizing issues of all scientific papers published in other Georgian and foreign journals apart from the list of the publications recommended by the Dissertation Board.

- 12.2. A prerequisite for defending a dissertation is the internationalization of the dissertation evaluation process that means, the doctoral student should meet at least one of the following requirements:
- a) The doctoral student has a foreign supervisor/co-supervisor;
- b) The Dissertation Board of the Faculty provides the international review for the one of the published articles linked to the dissertation topic /articles sent to be published or a brief version (30-45 pages) of the dissertation:

- c) Brief version (30-45 pages) of the dissertation translated into English is sent to the leading foreign universities and scientific-research centers, the list of that is made by the Dissertation Board;
- d) Participation in the international conferences/symposiums/congress.
- e) Publishing of the article in the matter-related reviewable journal/journals included in the international databases
- 12.3 After submitting all necessary documents to the Dissertation Board by the doctoral student, within one month, the materials shall be checked and in case of finding lack of something, the doctoral student shall be given the relevant period (maximum one month) for improvement.
- 12.4 When the documents are completely submitted, the Dissertation Board sets the date for the defence of the dissertation, appoints the sectoral collegium and allocates two/three reviewers one of which should be from the university. The reviewers should have the academic degree of Doctor, research experience in the field of the doctoral dissertation topic. The reviewers are given the whole text of the dissertation. In case of submitting a positive conclusion, the sectoral collegium shall be presented the dissertation tribute.
- 12.5 As per request of the scientific supervisor, one reviewer may be an active or retired employee of some foreign learning, scientific or research institution, a person with an academic degree of Doctor.
- 12.6. Together with the evaluation of the dissertation paper, the review should include the relevant recommendations about admission to the defence of the paper of giving it back to the doctoral student for correction, or disapproval of the admission to defence, that shall be given in the evaluation of the dissertation paper.
- 12.7. The admission of the dissertation to defense is given on the basis of the conclusions submitted by the evaluators (reviewers).
- 12.8. In case of negative evaluation of the dissertation paper by one of the two reviewers, the dissertation board shall allocate an additional reviewer.
- 12.9 If two reviewers demand return of the paper to the student for additional work, the paper shall not be allowed to defence and the doctoral student shall be given it back for processing during 2 months and the /he is obliged to resubmit the processed paper to the reviewers; The doctoral student is given the paper back only once; The reviewers will evaluate the processed version only with the recommendation on admission or disapproval of the paper on defence.
- 12.10 The reviewer shall submit a conclusion (review) no less than 2 months after submission of the dissertation. If additional reviewer is allocated, he/she shall be given 2 months for the paper evaluation.
- 12.11 The decision on admission of the dissertation paper on public defence, or returning it to the doctoral student for correction, or refusal on defence must be specified in the conclusion;
- 12.12 If the dissertation shall not be allowed to defence, according to the decision of the Dissertation Board, the doctoral student and shall be given the right to work on the dissertation paper additionally for one academic year and submit it again (after having paid the fees for relevant credits). Otherwise, the person shall not be allowed to defence.
- 12.13 In case if the corrected paper is given negative evaluation again, the doctoral student's paper shall not be allowed to be submitted to defence.
- 12.14 The Dissertation Board shall give reviewers' conclusions to the doctoral student, and in case of admission to defence informs about the defence date as well. The doctoral students shall be given 1 month to get ready for defence

12.15. If the doctoral student is given refusal on defence, one copy of the rejected paper and the reviewers' written concussions shall be passed to the Dissertation Board to be kept. The doctoral student has the right to be acquainted with these documents. The rest of the documents shall be given to the doctoral student.

# Article 13. Defending the dissertation

A chairperson chosen by the collegium via open voting leads the sectoral collegium. The sectoral collegium choses a secretary via open voting, who is responsible for writing the minutes of the meeting. The proceedings of the meeting shall be reflected in the minutes that is signed by the chairperson of the sectoral collegium and the secretary.

The defence of the dissertation is public in front of the sectoral collegium (if the meeting is attended by all member of the collegium) according to the following procedures:

- 13.1 The chairperson of the sectoral collegium presents the doctoral students to the sectoral collegium (5-10 minutes);
- 13.2 The doctoral student presents the major outcomes of his/her research (20 min);
- 13.3A scientific supervisor of a student presents its feedback on the dissertation and a student (10-15 minutes)
- 13.4 The doctoral reviewers present their notes and opinions (each 10-15 min); the dispute is conducted and the reviewer's notes and opinions are discussed. The doctoral student is given possibility to comment on notes (30) min.
- 13.5 Defence of the dissertation is able in case of absence of one of the reviewers for the reasonable excuse (if his/her conclusion is positive).
- 13.6 The collegium evaluates the doctoral student in accordance with the set criteria (established by the Dissertation Board) at the closed meeting of the sectoral collegium.
- 13.7 The collegium evaluates the doctoral student in accordance with the set criteria (established by the Dissertation Board) at the closed meeting of the sectoral collegium
- A) Summa cum laude excellent work;
- B) Very good (magna cum laude) a result that exceeds the requirements in every way;
- C) Good (cum laude) the result that exceeds the requirements;
- D) Average (bene) average level work that meets the basic requirements;
- 13.8 The dissertation is considered as defended in case of reception the evaluation considered by the points a, b, c, d, e of the article 7.
- 13.9. The collegium will submit the minute to the dissertation board. In case of successful defence of the dissertation, the board takes decision about awarding of an academic degree of Doctor.
- 13.10 Upon receipt of the insufficient assessment, the doctoral student is entitled to submit a revised dissertation within one year. However, in case of receiving completely unsatisfactory assessment, the doctoral student loses the right to submit the same dissertation.
- 13.12 After defending the dissertation, the doctoral student must publish printed or electronic copy of the dissertation within the time set by the Board. One printed and electronic copy of the dissertation must be submitted to the University Library. At the same time, electronic copy of the dissertation should be submitted to the Georgian National Library.

# Article14. The diploma of Academic Degree of Doctor

LEPL Samtskhe-Javakheti State University (Observatory is included in the annex of the Diploma)

- 14.1 Doctoral Diploma is issued within 6 months after the date of the dissertation publication.
- 14.2 Before issuance of the Diploma, the doctoral student is given a relevant certificate on awarding the academic degree.
- 14.3. The Diploma should contain:
- a) The writing "Georgia", that should be placed in the top central part of the Diploma;
- b) Full name of the institution (without indicating organizational-legal form);
- c) The institution logo (if any);
- d) Writing "Doctor's Diploma";
- e) Diploma's serial number (in Latin) and a six-digit individual number (in Arab numbers in order);
- f) The name of organ awarding the academic degree;
- g) Number and date (day/month/year) of the decision made about awarding the degree;
- h) The person's first name and surname who was awarded the qualification/academic degree;
- i) The academic degree awarded;
- j) First name, surname (completely) and signature of the head of the unit awarding the academic degree;
- k) First name, surname (completely) and signature of the head of the institution;
- l) The place where Diploma was awarded;
- m) Date of issue of Diploma (day/month/year);
- n) Seal of the institution;
- o) Registration number of Diploma in the register of Diplomas and Duplicates.
- 14.4 Apart from the data provided for in paragraph 14.3, the title of the dissertation must be written in Doctor's Diploma;
- 14.5 The copy of Diploma is kelp in the university archive.
- Article15. In case of academic misconduct (falsification of the information in the dissertation or plagiarism), the doctor shall be revoked the academic degree of Doctor according to the decision made by the University Dissertation Board.

# Article16. Funding

16.1. Funding of the student takes place from the state grant in the form of university funding, charity and self-funding