# Successfully teaching astronomy in schools (STARS)

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## Motivation for the project

- \* Need for rejuvenation of science education in our schools.
- \* In most education systems in Central and Eastern Europe, teachers struggle due to lack of resources and sometimes even information.
- \* Support the teachers teaching astronomy at secondary education.
- \* Improve teaching practices, as well as give concrete ideas of how to present a given topic in astronomy-related curriculum.

#### AIMS

- \* To equip teachers with innovative methodologies, knowledge and tools to deliver astronomy-related curriculum in a relevant and meaningful manner.
- \* To foster the acquisition of critical thinking, analytical and abstract reasoning skills, thus contributing to increasing the attainment levels among students, as well as the acquisition of relevant knowledge
- \* To develop a concept for new educational program in astronomy which is reflecting current trends and students' attitude towards the modern learning process.
- \* To equip target groups with **open education resources on astronomy** that are of high-quality, free to use and available **in their national languages**.

### STARS OUTPUTS

- STARS Methodological Handbook for Teachers
- \* STARS Training Program for Teachers
- STARS Online Platform for Teachers, Students and Parent
- STARS Concept for Astronomy Education Program

#### STARS Methodological Handbook for Teachers

- \* Consists of 10 chapters covering different astronomical topics: <a href="https://app.project-stars.com/en">https://app.project-stars.com/en</a>
- \* Each chapter has theoretical information for the teacher, practical exercises for the students, an answers where appropriate.
- \* The Bulgarian version: <a href="https://project-stars.com/">https://project-stars.com/</a>
  <a href="preview-file/STARS-MP-pre-ucitelov-BG-final-nahlad-2a.pdf">preview-file/STARS-MP-pre-ucitelov-BG-final-nahlad-2a.pdf</a>

#### EXAMPLES

- \* Constellations: theoretical part for the teacher: (<a href="https://app.project-stars.com/kapitola1-en">https://app.project-stars.com/kapitola1-en</a>); example exercise: (<a href="https://app.project-stars.com/kapitola1/ulohy/uloha3-en">https://app.project-stars.com/kapitola1/ulohy/uloha3-en</a>)
- \* Milky Way and Other Galaxies: <a href="https://app.project-stars.com/kapitola8-en">https://app.project-stars.com/kapitola8-en</a>; example exercise: <a href="https://app.project-stars.com/kapitola8/ulohy/vzdialenosti-vo-vesmire/uloha-8-model-suhvezdia-orion-en">https://app.project-stars.com/kapitola8/ulohy/vzdialenosti-vo-vesmire/uloha-8-model-suhvezdia-orion-en</a>

#### RESULTS AND FEEDBACK

- \* Easy to use materials in our native language.
- \* More practical exercises for the students.
- \* The materials are already successfully used by teachers in secondary schools in Bulgaria, as well as in extracurricular classes.