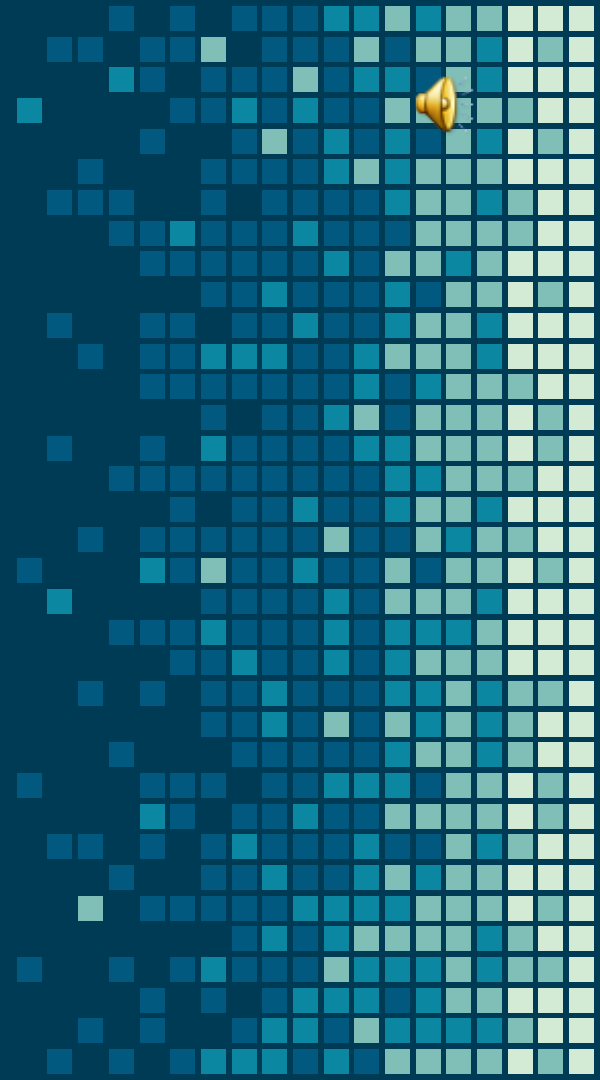


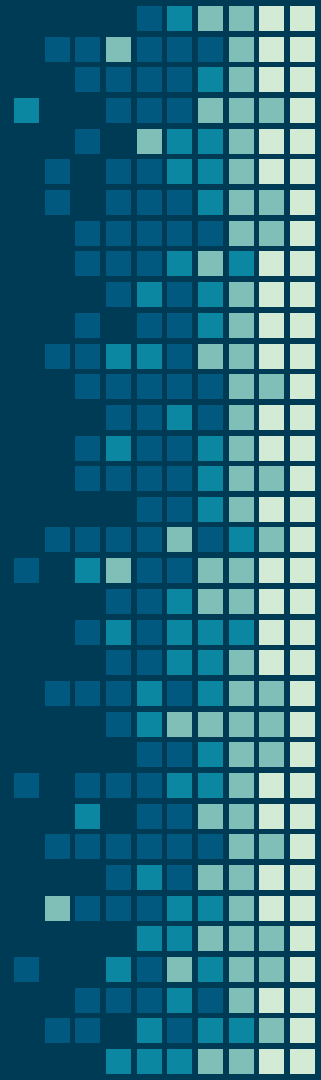
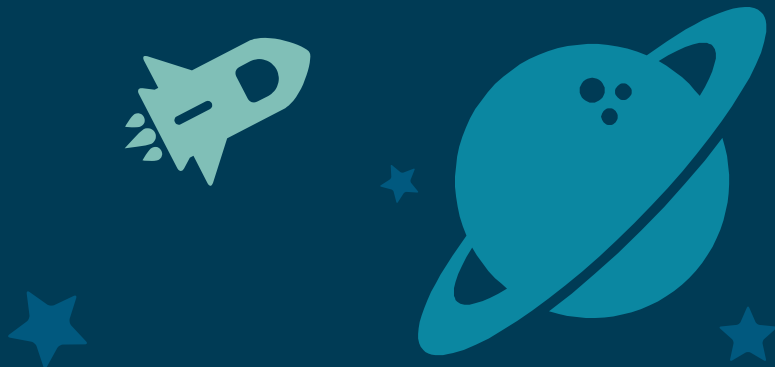
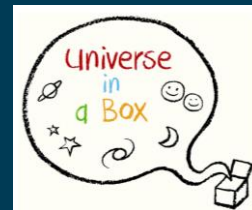
Teaching with Space: Universe in the Classroom



Mahbobah Ahmadi
Astronomy & Society Group
Universiteit Leiden



Universiteit Leiden



Prizes, Grants and Honours

- 2017 **HundrED's 100 Global List of Inspiring Innovations**
- 2015 Scientix Award for **Best Resources in Science Technology, Mathematics and Engineering for Universe in a Box**
Finalist of Qatar Foundation's **WISE Awards** in Innovation in Education
- 2014 Nomination for **Open Knowledge Foundation Award** for IAU astroEDU
Scientix Award for **Best Resources in Science, Technology, Mathematics and Engineering for IAU astroEDU**
- 2011 American Association for the Advancement of Science –
Science Magazine **SPORE Award for Universe Awareness**

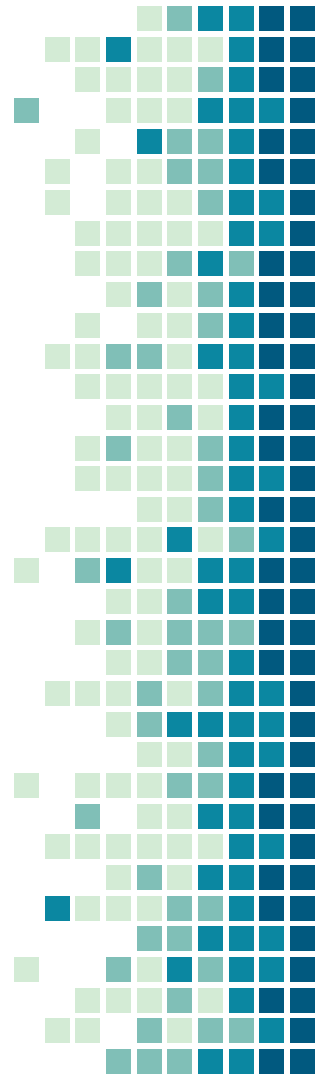


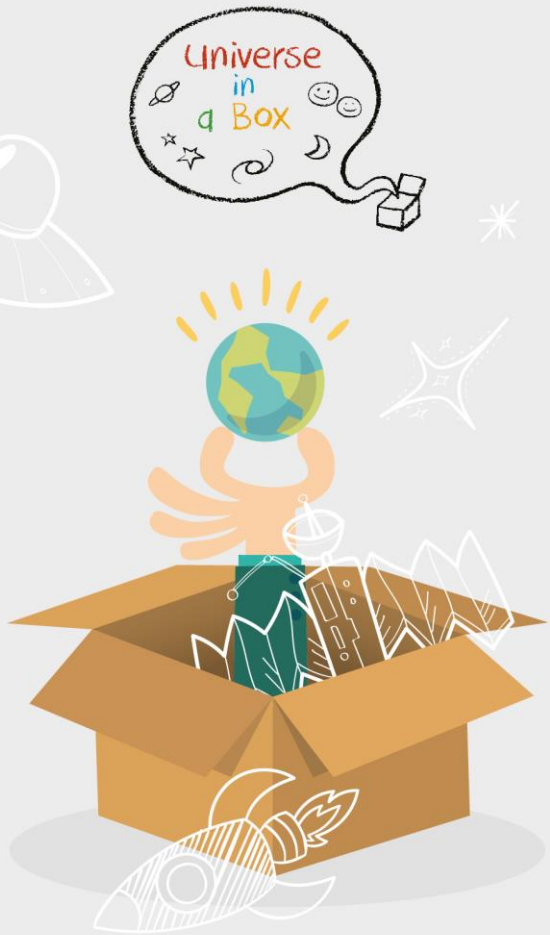


UNIVERSE AWARENESS

Ages 4-10

- UNAWAVE uses the beauty and grandeur of the Universe to inspire children and encourage them to develop an interest in science and technology.
- Until UNAWAVE, there were no large-scale attempts to use astronomy as a tool for inspiring and educating young children.
- A global network of 1,000+ astronomers, teachers & educators, active in 63 countries and counting;
- Discovery Club: an educational programme for children at refugee camps in the Netherlands.





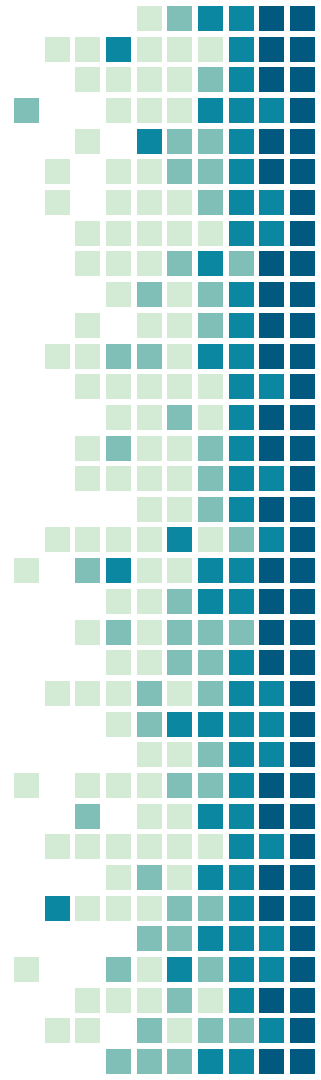
UNIVERSE IN A BOX

Ages 4-10

An educational kit to assist teachers and educators in bringing astronomy and space sciences to children around the world.

The activity book includes relevant background information, how-to steps, guidance on further experimentation, and craft templates for use in the classroom.

- complete activity book describing **40 activities** is available free online
- designed to be used by any type of instructor
- possibility to build your own Universe in a Box
- customize the box with additional activities and materials of your own



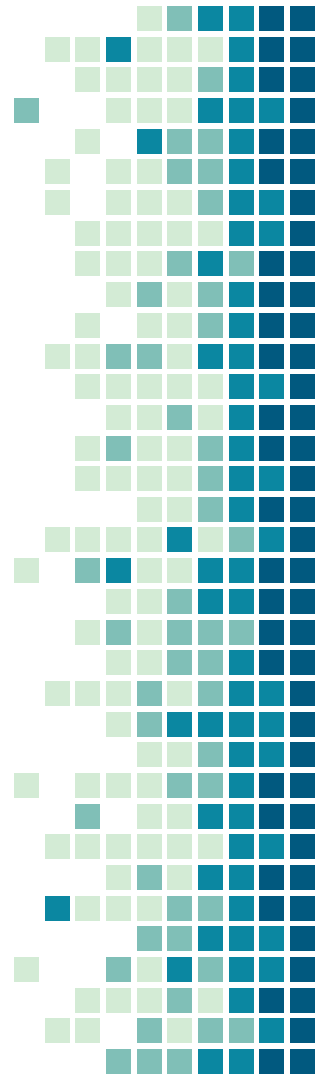
INSPIRING A NEW GENERATION OF SPACE EXPLORERS



SPACE AWARENESS

Ages 8-18

- An international project striving to increase their enthusiasm and knowledge of science and technology using the exciting possibilities of space, and inspiring them to pursue a career in relation to space subjects.
- **30** partners all over Europe, Africa and Asia
- Peer-reviewed education activities, easily adaptable to different disciplines and countries
- Educational resources, stories about space and careers, webinars, interviews...
- A unique *Islamic Heritage Kit* fostering tolerance and inclusion for different cultures





ASTROEDU

peer-reviewed astronomy
education activities

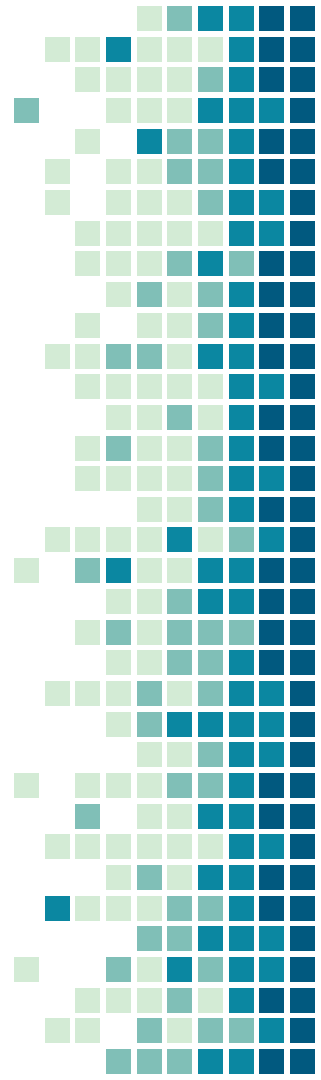


IAU astroEDU

Ages 6-19

- open-access platform for peer-reviewed science education activities.
- allows educators to discover, review, distribute, improve and remix science education activities
- a free peer-review service by a professional educator and an astronomer to ensure a high scientific and educational standard.

Star in a Box: a mathematics app that explores the life-cycle of stars.





IAU 100

All ages

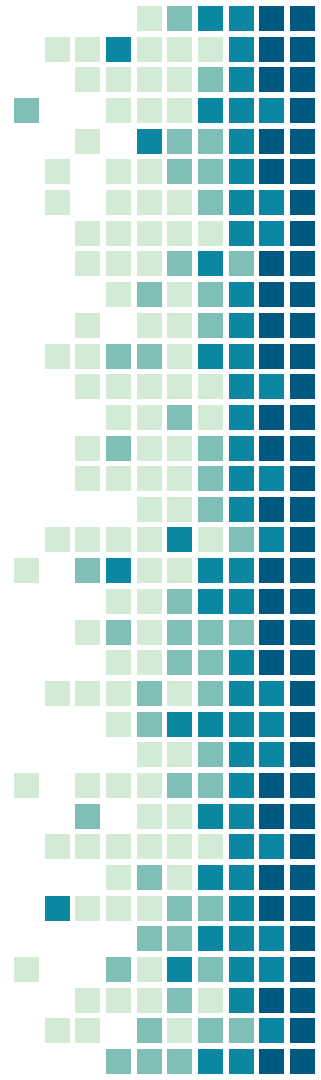
- 2019: **100th anniversary** of the International Astronomical Union (IAU)
- A global celebration highlighting the major achievements of astronomy in the past century, with a strong emphasis on the use of ***astronomy as a tool for education, development and diplomacy.***

Astronomy for education

Improve science literacy, in particular in the field of astronomy by **inspiring and promoting** the interest for the subject in **young minds** as well as **training teachers and educators** on the use of new tools and methodologies that enable the development of **scientific literacy** and acquisition of **21st century skills**.

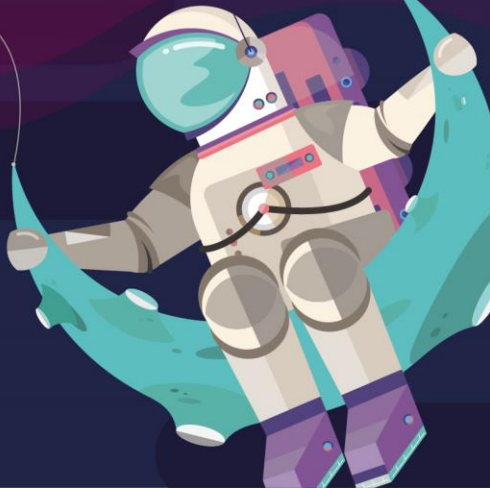
Star Parties

Through the organisation of sidewalk astronomy events, this programme **will enable** as many people as possible, especially **children, to look at the sky through a telescope** and gain a basic understanding of the Universe.





News
from Across
the Universe

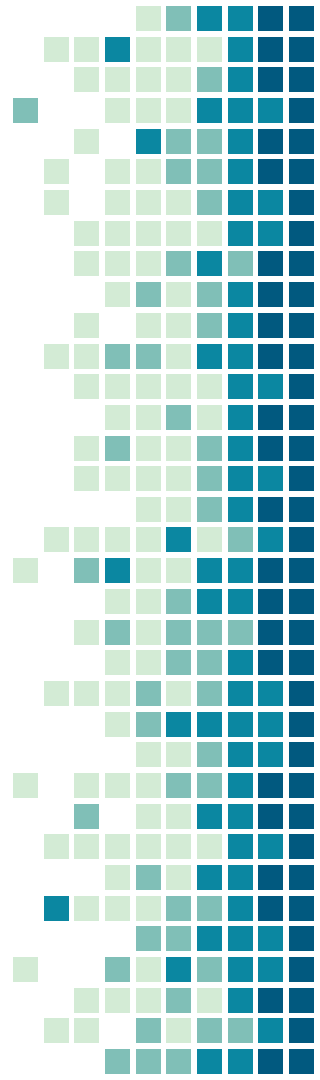


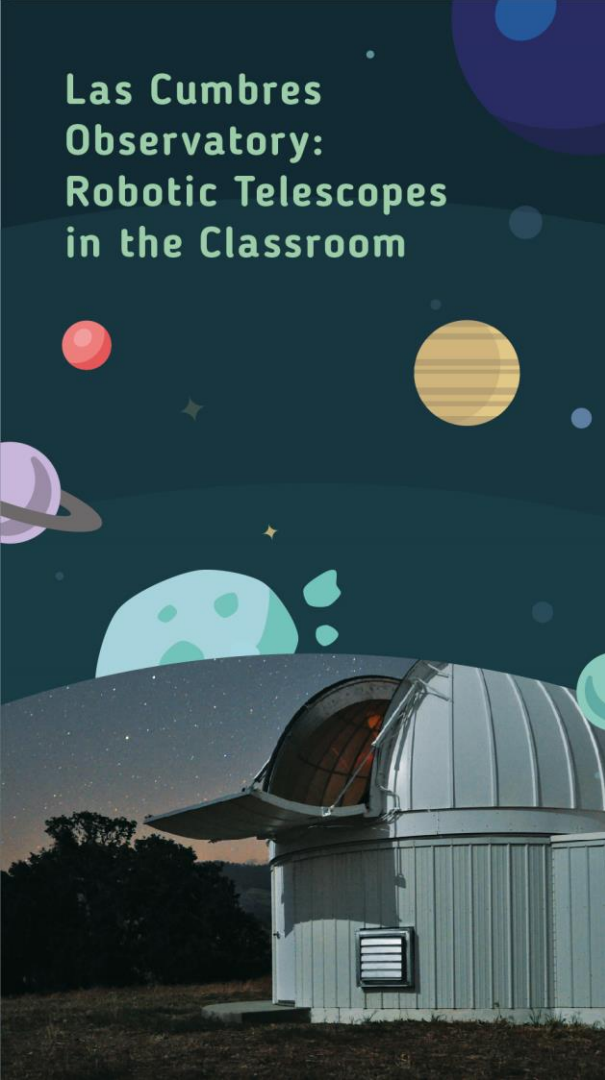
SPACE SCOOP

Ages 8 and Up

A weekly astronomy news service for children:

- child-friendly language
- the biggest astronomy news service for children all around the world, in **up to 33 languages**.
- produced **more than 350** astronomy news stories to date
- can be adapted to many different formats (print, digital, video & podcast) and digested by many audiences including various age groups, visually-impaired, illiterate, no internet access, etc.





Las Cumbres Observatory: Robotic Telescopes in the Classroom

Las Cumbres Observatory



All Ages

One-of-a-kind, global network of robotic telescopes used by thousands of professional astronomers, educators and their students.

- 10 x 0.4-m robotic telescopes, controlled via the internet.
- Fully supported educational resources, provided by 16 education partners.
- A large archive of educational resources using robotic telescopes.

Outstanding educational resources

- **SpaceBook:** an encyclopedia of space
- **Messier Bingo:** explore astronomical objects with this bingo-based game
- **Ada's Adventures in Science:** comic books inspiring kids to do science
- **Serol's Cosmic Explorers:** the robot who controls all the telescopes

THANKS!

Any questions?

Email me:

ahmadi@strw.leidenuniv.nl

