Universiteit
Leiden
The Netherlands

Astronomy & Society Group

LEIDEN OBSERVATORY

The aim of the Astronomy & Society Group at Leiden Observatory is to engage the public with the wonders of the Universe and share the scientific, technological, cultural and educational aspects of astronomy with society.

Earthball activity at Balud Elementary School in Samar, Philippines, February 2014. Credit: S. Tumampos/UNAWE Philippines.

Universe Awareness

Universe Awareness (UNAWE) uses the beauty and grandeur of the Universe to inspire young children and encourage them to develop an interest in science and technology.

UNAWE activities with small children in San Cristobal El Alto, Sacatepéquez, Guatemala, September 2015. Credit: Alan Garcia/UNAWE Guatemala.

The programme also aims to introduce children to the idea of global citizenship at a crucial stage of their development – to show them that they are part of an international community.

Until the advent of UNAWE, there were no large scale attempts to use astronomy as a tool for inspiring and educating young children. Therefore, while our resources are open to all, the programme is aimed at children aged 4 to 10 years, especially those from underprivileged communities. UNAWE is active in 62 countries and Leiden University Observatory is the founder and coordinator of the programme.

www.unawe.org

@unawe

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Universe in a Box activity in the Ladakh region of the Himalayas, India, July 2015. Credit: J. Polednikova.

Space Awareness

Space Awareness uses the excitement of space missions and discoveries to engage children and teenagers with science and technology and stimulate their sense of European and global citizenship.

UNAWE at Mission X with ESA astronaut Andre Kuipers, the Netherlands, 2013. Credit: UNAWE

Space Awareness inspires primary school children when their curiosity is high and their value systems are being formed. Space Awareness shows children and teenagers the relevance of space science in their lives and the opportunities offered by space sciences for their future. Space Awareness is an EU-funded project involving 10 partner organisations and 22 national nodes in Europe and Africa.

www.space-awareness.org

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UNAWE activities in Heidelberg, Germany. Credit: UNAWE Germany.

Citizen Science Lab

The Citizen Science Lab will be an incubator and central hub for citizen science efforts with a particular focus on astronomy, environmental science and Earth observations.

With the LIGHT2015 Dark Sky Meter app, citizen scientists measure the quality of the night sky in their regions and thus contribute to understanding of night-sky quality around the world. Credit: DDQ/Leiden Univ/IAU.

The Citizen Science Lab focuses on societally relevant problems that can be addressed only by involving a substantial fraction of society. It builds on the world-leading citizen science, outreach and education expertise at Leiden University, which spearheaded the citizen science initiatives iSPEX and the International Year of Light's LIGHT2015 Dark Sky Meter app.

www.ispex.nl/en/

iSPEX, an add-on with complementary app, instantly turns a smartphone into a scientific instrument to measure dust in our atmosphere. Credit: iSPEX/Leiden Univ.

Open Science Centre

Open Science Centre is a learning space for Science, Technology, Engineering, Arts and Mathematics (STEAM) education that fosters sustainable development of local communities.

Artist's impression of Open Science Centre. Credit: de NAMEN.

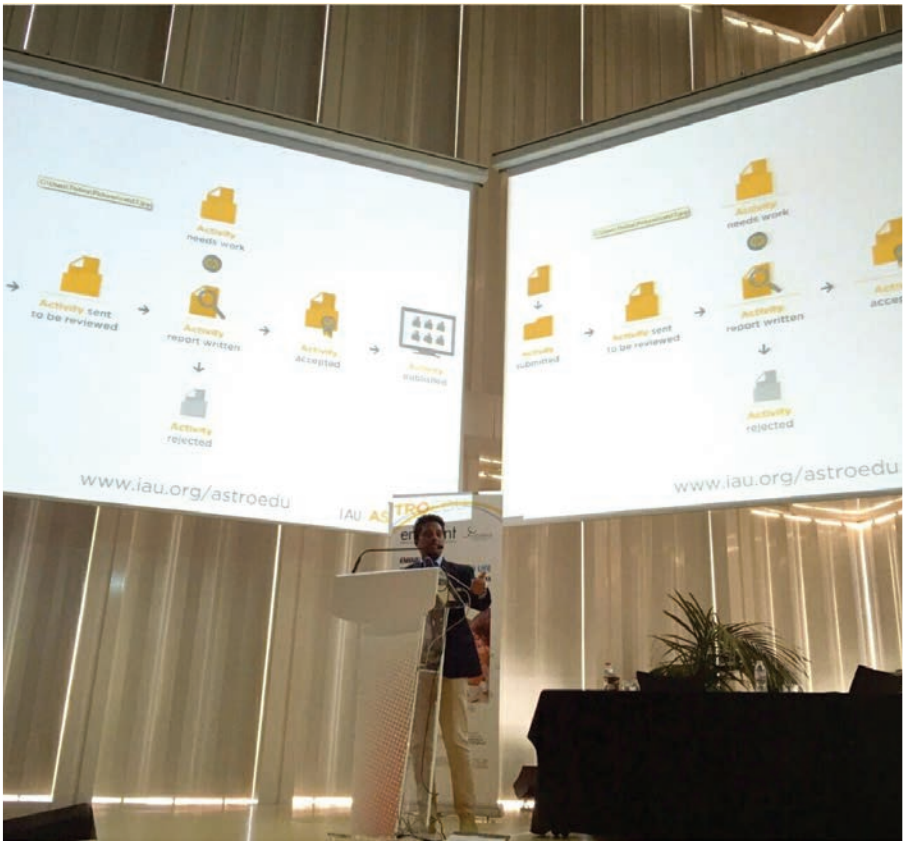
This engaging learning space is based on open standards: open architecture, open education, open technology and open science. The Open Science Centre is designed for low-income and/or remote communities, but it is open to everyone and can be established anywhere.

www.opensciencecentre.org

UNAWE and Space Club activity at American School in the Hague, the Netherlands, June 2014. The Open Science Centre will support this type of activity. Credit: UNAWE.

IAU astroEDU

IAU astroEDU is an open-access platform for peer-reviewed astronomy education activities.



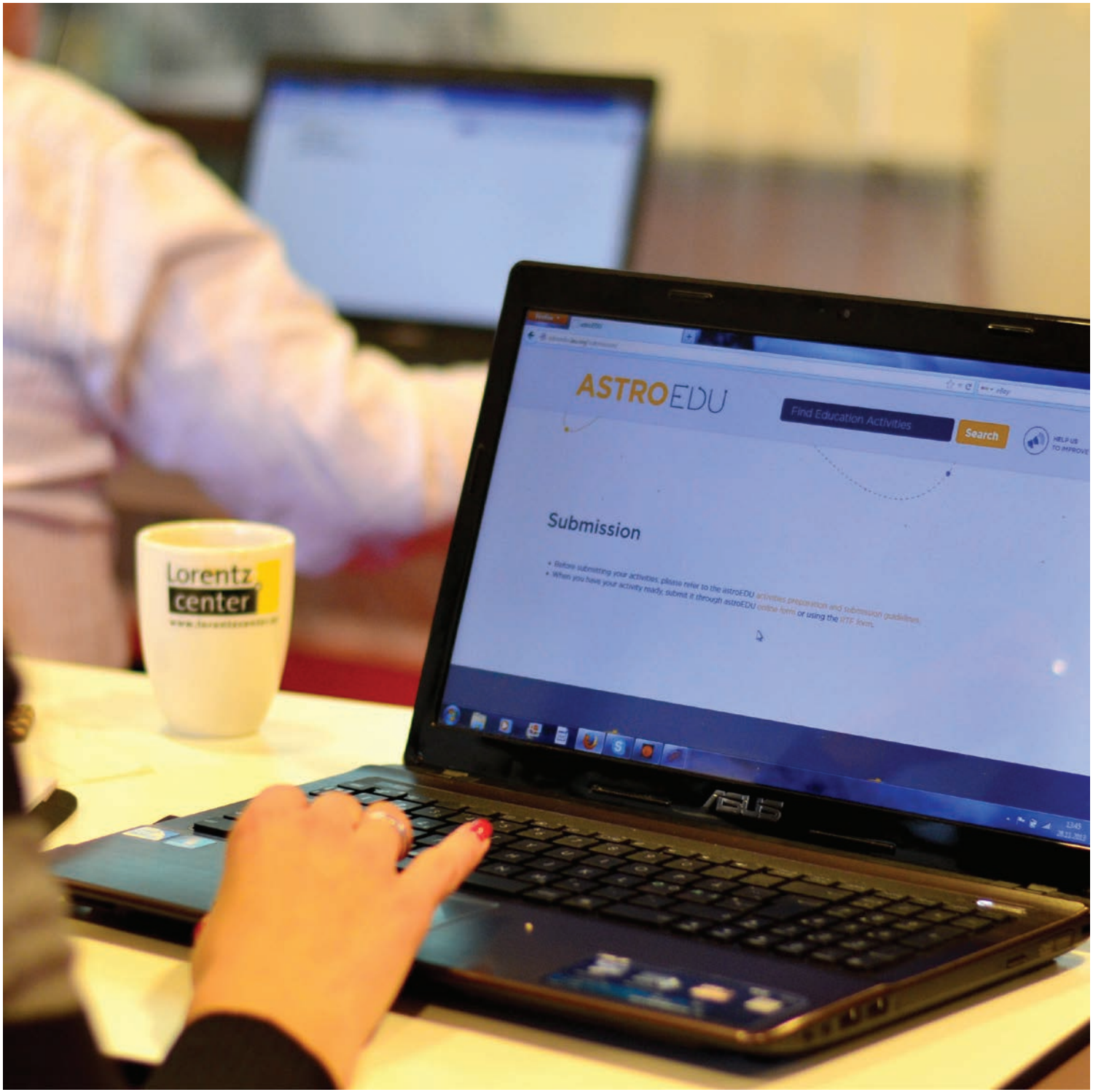
astroEDU Assistant Editor Thilina Heenatigala presents astroEDU at the Experts Meeting in Education Networking (EMINENT) annual event organised by European Schoolnet (EUN), Barcelona, Spain, 19 November 2015. Credit: P. Russo/astroEDU.

IAU astroEDU allows educators to discover, review, distribute, improve and remix astronomy education activities. It offers a free peer-review service by a professional educator and an astronomer to ensure a high scientific and educational standard. astroEDU targets activity guides, tutorials and other activities in the area of astronomy education, prepared by teachers, educators and education specialists.

www.iau.org/astroEDU

@IAUastroEDU

/iauastroedu



Teachers using astroEDU platform during ESA/GTTP Teacher Training Workshop, Leiden, the Netherlands, November 2014. Credit: C. Provot/UNAWE/astroEDU/IAU.

TEMI: Teaching Enquiry with Mysteries Incorporated

Teaching Enquiry with Mysteries Incorporated (TEMI) is a European teacher training project which aims to help transform science and mathematics teaching practice in secondary school education across Europe.

TEMI activity during TEMI International Conference, Leiden, the Netherlands, 16 April 2016. Credit: W. Schrier.

TEMI gives teachers new skills to engage with their students, exciting new resources and the extended support needed to effectively introduce enquiry-based learning into their classrooms. Leiden Observatory is implementing the project in the Netherlands and is developing several astronomy resources as well as running several TEMI teacher training workshops.

www.teachingmysteries.eu

@teachmysteries

TEMI teacher training, Leiden, the Netherlands, 28 June 2015. Credit: W. Schrier.

Europlanet

Europlanet links research institutions and companies active in planetary research in Europe and around the world.

Educational activity with children, Iceland, February 2013. Credit: UNAWE Iceland.

Planetary science covers the study of our solar system and those around other stars. It is an interdisciplinary field of research that covers astronomy and geophysics, robotic and human exploration of other planets and the search for extraterrestrial life. Leiden Observatory leads the Outreach Services part of Europlanet 2020 RI, which includes science communication training workshops to equip planetary scientists with the skills to convey their work effectively to different audiences, including educators and the public, and creating and curating high-quality teaching resources and activities for use in classrooms and informal learning settings.

www.europlanet-eu.org

@europlanetmedia

/europlanetmedia/

Working with teachers, Science Academy, Leiden, the Netherlands, September 2015. Credit: UNAWE.

International Astronomical Union

Astronomy for Development &

Communicating Astronomy with the Public

Olivier Hainaut, former Science Liaison in the ESO Education and Public Outreach Department, during CAP2013 conference, Poland, October 2013. Credit: CAP2013/M. Slonina/FI Projekt/New Space Foundation.

The Astronomy & Society Group is involved with several committees, projects and programmes of the International Astronomical Union, namely the Office of Astronomy for Development, Office for Astronomy Outreach and the IAU Commission Communicating Astronomy with the Public.

www.iau.org

www.communicatingastronomy.org

www.astro4dev.org

Kevin Govender, Director of IAU Office of Astronomy for Development, during CAP2013 conference, Poland, October 2013. Credit: CAP2013/M. Slonina/FI Projekt/New Space Foundation.

IAU CAP2013 participants, Poland, October 2013. Credit: CAP2013/M. Slonina/FI Projekt/New Space Foundation.

Research & Development

Research & Development activities aim to improve the understanding of astronomy and society's interactions and develop innovative programmes, projects and tools to improve and empower those interactions.

Development of new educational activities during TEMI congress in Leiden, the Netherlands, April 2016. Credit: W. Schrier.

The Astronomy & Society Group is particularly interested in the following topics:

- Public understanding of astronomy
- Global programmes in astronomy communication and education
- Astronomy and human capacity building
- Open standards in education and public outreach
- Astronomers' attitudes, views and motivations on public engagement initiatives
- Gender-issues in science education
- Citizen science
- Society and science policy
- Usercentric development of science communication projects and programmes

Educators trying educational app during TEMI congress in Leiden, the Netherlands, April 2016. Credit: W. Schrier.

How to get involved?

We love new ideas and working with creative people. Contact us at any time if you want to bounce an idea or join one of our initiatives.

CONTACTS

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