IAU's Office of Astronomy for Education Astrophotography Contest

1. General

One of the goals of the IAU's Office of Astronomy for Education is to provide educators world-wide with high quality astronomy educational resources. One of said resources is a multi-lingual astronomy glossary where each concept is illustrated with a suitable image or video. While many astronomical phenomena can be depicted with publicly available images from professional observatories, we have identified some key concepts that can be better illustrated with images taken by amateur astronomers.

To fill this gap, the OAE is launching this astronomy competition for a number of categories listed below. Images and time-lapse videos will be evaluated by a jury of astrophotographers and astronomy educators on the basis of their visual, technical, and educational value. Winners will be awarded cash prizes, and their entries will illustrate the OAE astronomy glossary under a Creative Commons Attribution 4.0 International License (CC BY 4.0).

Details on the categories, submission, prizes and other rules of the competition are described below.

2. Categories

- 1. There are 10 categories in this competition. The jury will select three winning entries in each category.
- 2. Below we describe the characteristics that the jury will value in each category. Given that the images and videos will be used for educational purposes to illustrate these astronomical concepts, submissions should adhere to these guidelines as closely as possible.

Star trails. Wide-field images of star trails showing a celestial pole, with some foreground scenery to provide context. The goal is to clearly illustrate the Earth's rotation and the apparent motion of the stars on the sky.

Meteor showers. Wide-field images of major meteor showers where the radiant is clearly visible, with some foreground scenery for context. The goal is to illustrate the apparent origin of the cometary dust particles as they enter the atmosphere.

Comets. The image should illustrate at least one of the following characteristics of comets: the various components (coma, ion tail, dust tail); the comet's apparent size on the sky (such as showing the comet against foreground scenery); the comet's motion over time, including changes in its structure.

Total lunar eclipse. Composite images of a total lunar eclipse where the different stages of the eclipse are arranged in a chronological sequence. The sequence could be displayed against some foreground scenery for context. The goal is to illustrate how the Earth's shadow progressively covers the Moon during a total lunar eclipse.

Light pollution. Images showing the harmful effects of light pollution. Possible ideas include showing the night sky with and without light pollution from the same area, shooting street lamps through a diffraction grating to illustrate the spectra of different light sources, etc.

Aurorae (still images). Images of aurorae against some foreground scenery for context. We especially encourage submissions that capture unusual colours and/or where the aurora takes place directly overhead.

Aurorae (time-lapses). Time-lapse videos of aurorae, with the same guidelines as for still images. When evaluating shortlisted entries we will request the individual frames that make up the final video.

Wide star fields, such as prominent constellations against some foreground scenery for context. The brightest stars of the field should clearly stand out among the fainter ones (using, for instance, a diffusion filter). The goal is to display the range in star colours and brightnesses, in the context of well-known night sky constellations. The field of view should be large enough so that the viewer can readily identify the field when looking up at the sky.

Sun/Moon haloes. Images of Sun/Moon haloes created by ice crystals in the atmosphere. We encourage the submission of images showing complex haloes with multiple components beyond the usual 22 degree halo. The goal is to illustrate how refraction and reflection of Sun/Moonlight on ice crystals leads to spectacular optical phenomena.

Galilean moons. Time-lapse videos illustrating the Galilean moons orbiting around Jupiter over a timespan of several days, including eclipses as they cross the jovian disk. When evaluating shortlisted entries we will request the individual frames that make up the final video.

3. Eligibility

- 1. Each participant can submit up to 10 entries in total to this competition. More than one entry can be submitted to the same category.
- 2. There is no restriction on the date when the images were taken. Images taken before the competition starts will be accepted.
- 3. By submitting an entry, participants agree to these rules and guarantee to the OAE that:
 - a. the image/video is their own original work and was taken and processed by them

- b. does not violate the copyright (or any other rights) of third parties
- c. does not include defamatory or obscene content
- d. has written consent from any person that can be identified in the image/video
- e. Group entries are allowed. In this case, each group must nominate one representative for the purpose of submission and subsequent communication. This representative must have the written consent of the other group members to submit that entry.
- 4. Some degree of processing and enhancing is allowed, as is common in astrophotography. But given the educational purpose of these images/videos, the jury might disqualify entries that significantly misrepresent the corresponding astronomical phenomena. In particular, the following processing techniques are not allowed:
 - a. Using different focal lengths for the foreground and background
 - b. Foreground and background imaged at different locations, or at significantly different times of the day
 - c. Cloning or painting over the image
- 5. Submissions with watermarks, names, copyright lines, or any text of any kind are not allowed.
- 6. Members of the jury, OAE staff and their immediate relatives cannot submit entries to this competition.

4. Submission

- 1. Images should be submitted as JPEG files with at least 2000 pixels along their widest dimension. Videos should be submitted in MOV, MPG, MP4 or AVI formats, and should be no longer than 3 minutes.
- 2. Entries must be submitted by April 15 at noon CET. Late submissions will not be considered.
- 3. Entries must be submitted via this Google form. If you have any problems submitting your entries please contact us at oae-astrophoto@astro4edu.org and we will try to arrange an alternative delivery system. Do not send your images or videos by email; submissions by email or any means other than the Google form above will not be accepted unless this has been explicitly agreed upon beforehand with the OAE.

5. Prizes

1. The jury will select three winning entries in each category, which will be awarded the following cash prizes:

a. First prize: 750 EUR

b. Second prize: 500 EUR

c. Third prize: 250 EUR

- 2. For group entries, the cash prize will be transferred to the contact person who submitted the winning entry.
- 3. A given participant can have more than one winning entry in different categories, but not within the same category.

6. Judging

- The OAE has appointed an international jury of astrophotographers and astronomy educators. Entries will be evaluated based not only on their aesthetic and technical merits, but also on their usefulness as educational resources to illustrate the corresponding terms in the OAE astronomical glossary.
- 2. The jury reserves the right not to award some or all the prizes in any category if they deem that no entries meet these requirements.
- 3. The organisers might contact participants in case of doubts regarding the veracity of their entries, and might request additional material such as raw images for verification purposes.
- 4. The decision of the jury on the winning entries is final.

7. Use of images/videos

- 1. All participants will retain the copyright on their entries. Winners grant the OAE the right to publish their entries under a Creative Commons Attribution 4.0 International License (CC BY 4.0). This license allows anyone to share and adapt the images/videos for any purpose, even commercial ones, as long as proper credit is given. This human-readable summary of the license does not substitute the actual license, which can be found in this link. Please read this license carefully.
- Non-winning entries will not be published under this CC BY 4.0 license, but we
 encourage participants to voluntarily release their entries under this license, or a
 similar one accepted by Wikimedia Commons, to enrich the pool of multimedia
 resources available to educators.

3. To promote the OAE astronomy glossary in general and the winning entries themselves in particular, said winning entries will be published in various popular-level astronomy magazines worldwide.

8. Liability

- By entering this competition, participants guarantee that they are the sole copyright owners of their images/videos. Should the OAE receive any right infringement claims from third parties, the affected participant will be required to compensate the OAE in full for any losses.
- 2. The OAE reserves the right to suspend or terminate this competition, to extend the deadline, and to adjust the competition rules.
- 3. These rules prevail over any other contradicting information found elsewhere, unless otherwise explicitly noted.
- 4. Should parts of these terms and conditions be ineffective or should there be a loophole, this shall not affect the effectiveness of the remaining parts. The invalid or missing parts shall be replaced by terms which come closest to the purpose of the contract and the statutory regulations.
- 5. The OAE is not liable for damages resulting from the impairment of the availability of the competition site in the event of technical disruptions and events of force majeure that cannot be influenced, or attacks by third parties against the competition site. The OAE will, however, try within the scope of its possibilities to guarantee the reliability and functionality of the competition site. However, the OAE does not guarantee that the competition site will function properly on the devices used by participants.

9. Applicable law

The OAE Astrophotography Competition is an undertaking of the International Astronomical Union (98-bis Blvd Arago, F–75014, Paris, France). As such, French law applies in the event of disputes. As far as legally permissible, the place of jurisdiction is agreed to be Paris.

10. Data protection

The OAE guarantees the highest possible standard of data protection within the framework of the competition and observes all relevant legal regulations. The OAE will not pass on personal data to third parties or sell address data. The OAE stores the personal data of the respective participants exclusively for the purpose of the competition. Participants hereby expressly declare their consent to the storage and use of the personal data provided for the above-mentioned purpose.