

# The International Year of Astronomy 2009 and the Re-enlightenment

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In 2009 we celebrate the International Year of Astronomy. The International Year of Astronomy 2009 is, above all, a celebration of the fulfilment, growth and creativity of humanity in its quest to understand the Universe and the life within it. In recent decades the pseudo-sciences seem to have been overpowering science in the public understanding of the world around us (Sagan 1996). As a prominent example, astrology is more widely accepted by the population as truth than alternative scientific explanations (Kelly et al. 1989). This may be due to the dedicated language of science or, more importantly, a lack of public understanding of it. Eventually, this lack of understanding will result in a notable hindrance in the cultural and literal advancement of society's comprehension of science and science subjects. If we are not careful, scientific, cultural, social and economic progress will be impeded and the modernization and prosperity of countries ultimately penalized. Therefore, now more than ever it is pressing to bring scientific and critical thinking back on to the agenda. The engagement of the scientific community, educators and the media is crucial in achieving this most important goal.

Astronomy, as a science, is committed to the use of critical reasoning, factual evidence, and rational methods of inquiry to probe the Universe. The amazement that the public feels toward astronomical images and quantities, together with addressing fundamental and inspirational questions regarding our place in the Universe, make astronomy not only essential for global education but also an excellent way of engaging the public in science, hence the importance of the International Year of Astronomy 2009.

The public feels it should be informed as

much as it needs to be, and this should not be neglected. We believe that scientists have a duty to make knowledge accessible to everyone. This will avoid public alienation of science and enhance human well-being and individual responsibility. Scientific knowledge and understanding need not be difficult, and science in general should be demystified. The specificity of the language needed to produce original contributions to science should not be used as an excuse for the scientific community not to communicate the advances in the field and not make basic methods and explanations accessible to the population.

IYA2009 will be a vehicle to highlight and make acknowledgeable the merit of a scientist's role as a valuable contributor to society. Above all, IYA2009 is a celebration of the fulfilment, growth and creativity of humanity in its quest to understand the Universe and life within it.

The IYA2009 will be a good opportunity to reaffirm the place of astronomy in the cultural, artistic, social and scientific order and contribute to the fulfilment, growth, and creativity for both the individual and society. For example, astronomical insights into human existence could be put to use in the arts, philosophy, politics, criticism and democracy.

The itch to explore and the sense of wonder, when approaching existentialist questions, are common to every human. In this respect, astronomy is the key to an examined life. It deals with fundamental questions regarding the origin, location, nature and destiny of our species, our planet and the Universe. We believe that the astronomical perspective (without relegating humans to a peripheral place) can work as a common basis for global equity and peace and

be used to change attitudes in an individualistic society towards a greater sense of community, as well as serve as a vehicle for mutual respect.

IYA2009 will clearly play an important role in establishing all of these aspects and it is a unique opportunity to re-enlighten society regarding science. Informed debate, scientific thinking, and tolerance as perceived from an astronomical perspective can be channelled into building a better world for our generation and the generations to come.

## References

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## Bios

**Carla Gonçalves** obtained her first degree in Astronomy at The University of Porto and her M.Sc. in Radiation Physics at University College London. After working as a Clinical Scientist for the English National Healthcare System. Carla is now working towards a degree in Medicine at UCL.

**Pedro Russo** is the IAU Coordinator for IYA2009. He is a member of the Venus Monitoring Camera/Venus Express Scientific Team and has been working with Europlanet, IAU Commission 55: Communicating Astronomy with the Public and EGU Earth and Space Science Informatics Division.