ASTRONOMICAL INSTITUTE

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Reference Letter on programme AstroMundus

The project AstroMundus provides a 2-year Masters course in astronomy and astrophysics for students selected by a special committee. The lectures are provided at University of Innsbruck (Austria), University and Astronomical Observatory Belgrade (Serbia), University of Gottingen (Germany), University and Astronomical Observatory of Padova, University and Astronomical Observatory Roma (Italy) and INAF Grand Sasso Science Institute (Italy).

It is a very successful programme providing excellent training to master students. Their theses are of high level, showing interesting projects with original results. This involves complementary lectures at five different Universities and Astronomical Observatories. The projects tackle subjects that will be important in the future including high performance computing or astronomical big data, detectors for space and ground-based facilities, theory of orbits for space applications (from satellites to NEO), space weather, gravitational wave detection, optical/IR astrophysics, planetary remote sensing, and exoplanet detection. This subjects correspond to the expertise at the involved Universities and Associated Partners. The students express their general satisfaction with tutors and with the level of individual courses, many of them continue as PhD students at the best Universities in Europe and elsewhere.

In the future, astronomy and astrophysics will deal with big data produced by new ground-based and space-born instruments or provided from simulations by high performance computers. Training in data-mining and computer science in view of future huge data flows is essential and even more efforts should be invested on this. Future projects in astronomy and astrophysics will be more and more international, students should be prepared for writing proposals and cooperation in big international teams.

I welcome the intention to rise the funds that would enable AstroMundus to offer scholarships to top-ranked students from countries where higher education in

astronomy and astrophysics is not present or is just starting to develop. The target countries include Colombia, where the astronomy and astrophysics quickly develops, and other South-American countries, as well as African, and some East-European and Asian countries, based on AstroMundus experience with previous students from those regions and on some feedback AstroMundus obtained from the IAU Office of Astronomy for Development. The last intentions need additional funds to cover new scholarships, I strongly support this intention.

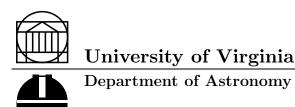
Yours sincerely Jan Valou Jan Palouš

Prague 29th July 2016

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June 25, 2016

Dr. Sonia Giovanna Temporin Institute for Astro– and Particle Physics University of Innsbruck Technikerstrasse 25/8 6020 Innsbruck Austria

Dear Giovanna:

I am writing to express my very strong support for the program you are organizing to provide scholarships for AstroMundus students. I understand that these scholarships would be co-funded by the European Commission, with the other half of the money coming from the AstroMundus consortium of universities and/or from private donors. The scholarships would be dedicated to selected, top-ranked students who come from countries where the study of astronomy and astrophysics at university level is missing or not yet sufficiently developed. This would provide a wonderful opportunity to develop strong astrophysics and other science programs in a much wider range of nations. Because astronomy is often a "gateway" science which leads young people to interests in a broad range of science, math, engineering, and technology fields, this program could have a significant multiplying effect on the development of technology in less developed countries. At the same time, this program would provide European universities access to a relatively untapped well of intellectual talent from these countries, and provide future contacts between these E.U. universities and the future academic leadership in these regions.

In the fall of 2011, I was an Erasmus Mundus visiting professor at the Institute of Astro– and Particle Physics at the University of Innsbruck. As part of my visit, I taught a course to the Masters and Ph.D. students. Thus, I know first hand what an excellent and diverse set of young scientists the AstroMundus program attracts. (I am still collaborating with one of these students, Barbara Ramirez from Venezuela.)

This is a great program which I hope will continue to train young astronomers from around the world! Erasmus

Sincerely,

Craig L. Sarazin W. H. Vanderbilt Professor of Astronomy

Peter B. Stetson, Principal Research Officer at the Dominion Astrophysical Observatory, NRC Herzberg Institute of Astronomy and Astrophysics, and Adjunct Professor at the University of Victoria, Victoria, Canada - June 14, 2016:

"I had the privilege of being an invited guest professor in Astrophysics with the AstroMundus programme at the Second University of Rome at Tor Vergata on three occasions: the spring semesters of 2011, 2014 and 2015. The students that I met in the Master course there came from highly varied backgrounds, but all were extremely bright, motivated, and enthusiastic. They were presented with quite challenging material, and seemed to absorb it with ease. They were able to acquire the fundamental knowledge and technical expertise necessary for placing them on a path toward sophisticated scientific insight and, in some cases, toward a promising career in astrophysics research. Financing the participation of very promising students who have little or no chance to study astrophysics in their home countries is not only an excellent way to nurture future generations of professional researchers and other scientifically literate citizens. It also makes a significant contribution toward erasing the remaining barriers to international understanding and cooperation in our world, especially in the areas of scientific and technological challenges."