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## Audience with participants in the Summer Course in Astrophysics of the Vatican Observatory

At 11.00 this morning, in the Clementine Hall of the Apostolic Palace, the Holy Father Francis received in audience the participants in the summer course in astrophysics organized by the Vatican Observatory.

The following is the Pope's address to those present:

## Address of the Holy Father

Dear Friends,

I offer a warm welcome to all of you, the professors and students of this summer course organized by the Vatican Observatory. Coming from many countries and cultures, you bring with you many different areas of expertise. You remind us that diversity can be united by a common goal of study, and that the success of that work depends on precisely this kind of diversity. By working together, from the variety of your backgrounds, you can help develop a common understanding of our universe.

Your topic this year concerns variable stars in the light of new, large astronomical surveys that are themselves the result of collaborative efforts by many nations and teams of scientists. As will become apparent in this course, only such teamwork can make sense of all these new data.

As our understanding of this vast universe gradually grows, so does our need to learn how to manage the flood of information we receive from so many different sources. Perhaps the way you yourselves manage such a torrent of data can offer hope to all those people in our world who feel overwhelmed by the information revolution of the internet and the social media!

Before all this information, and the vastness of our universe, we may be tempted to think of ourselves as small and insignificant. This fear is nothing new. More than two thousand years ago, the Psalmist could write: "When I

see your heavens, the work of your hands, the moon and the stars which you arranged, what is man that you should keep him in mind, mortal man, that you care for him?" He then went on to say: "Yet you have made him little less than a god; with glory and honour you crowned him" (Ps 8:4-6).

Whether as scientists or believers, it is always important to start by admitting there is much that we do not know. But it is equally important never to stop at a complacent agnosticism. Just as we should never think we know everything, we should never fear to try to learn more.

To know the universe, at least in part; to know what we know and what we don't know, and how we can go about learning more; this is the task of the scientist. There is another way of seeing things, that of metaphysics, which acknowledges the First Cause of everything, hidden from tools of measurement. Then there is still another way of seeing things, through the eyes of faith, which accepts God's self-disclosure. Harmonizing these different levels of knowledge leads us to understanding, and understanding – we hope – will make us open to wisdom.

The "glory and honour" of which the Psalmist speaks can also be understood in terms of the joy of intellectual work such as your own study of astronomy. It is through us, human beings, that this universe can become, so to speak, aware of itself and of its Maker. This is the gift, and the accompanying responsibility, given to us as thinking, rational creatures in this cosmos.

On the other hand, as human beings, we are more than thinking, rational beings. We are persons, with a sense of curiosity that drives us to know more; we are creatures, who work to learn and share what we have learned for the pure joy of doing so. And as people who love what we do, we can find in our love for this universe a foretaste of that divine Love which, in contemplating his creation, declared that it was good.

Dante famously wrote that it is love that moves the sun and the stars (cf. Paradiso, XXXIII, 145). May your work likewise be "moved" by love: love of truth; love of the universe itself; and love for one another as you work together amid your diversity.

With these prayerful sentiments, I cordially invoke the Lord's abundant blessings on you and upon your work.