

October 16, 2017

CGWA Director statement

I regret to miss this important press conference, which marks a significant milestone in the history of our Center for Gravitational Wave Astronomy. At this time I am in Buenos Aires, Argentina, spreading the “gospel” of gravitational wave astronomy and trying to get the local funding agencies to support the development of a new astronomical observatory in the northern mountains of the country, in one of the best places in the world to observe the sky.

More than twenty years ago I was hired by the University of Texas to develop the physics program at what was then UTB/TSC. With my faculty colleagues we graduated the first class of physics majors in 1998. We wanted to create a program that could give the students the opportunity to engage in research and learn science by doing it.

So we decided to initiate a research program in gravitational wave physics. For us, trained as gravitational theorists, this seemed the natural thing to do. At that time, construction of the LIGO observatories had barely started. There was a long road ahead of us. Many people thought that gravitational wave physics was an esoteric branch of physics with little connection to reality. Very few believed we were ever going to detect the elusive waves, much less start to observe unraveling right in front of our eyes, new astrophysical phenomena. And to try to do this, in one of the most impoverished areas of our country, for many it was sheer craziness.

But we were not discouraged by the numerous challenges and difficulties. We tried hard, but we had the chance to rub our elbows and engage our minds with the most successful scientists and students from the most competitive institutions in the country. It was and it is not an easy task. But we never gave up.

We had to go through several incredible institutional crises, which affected the fabric of academic life at both TSC and UTB. Dissolutions, mergers, several colleagues in other departments at the UTRGV legacy institutions were affected. Our work was not well understood by many, and many thought that this area was not truly relevant or fundamental for the institution. But we persevered. We continued working hard in what we believed in.

I am particularly grateful to the federal agencies, NASA, and NSF. I am also grateful to their program officers, who supervised our work and who never doubted our ability to offer a first class research opportunity to our students. They supported us generously with more than thirty million dollars in grants through these many years. They let us and

our students be part of this tremendous joy, which is to be at the forefront of transforming science.

When we started an optical follow up program many others doubted our skills to pull it through. But we succeeded at developing an optical astronomy program that is already changing the educational lives of our students at the local high schools. We succeeded at observing the first kilonova (the light emitted when two neutron stars collide).

This is a triumph of our CGWA and of our entire physics program. I want to reflect about it with our students. They are the main reason behind this success. And they need to specially take with them the lesson that we learned through this journey: determination, grit, are probably the most important qualities needed to make it.

You will find many people who would tell you that -because you come from an impoverished background- you are ill prepared. Many will doubt your ability to thrive or understand physics. But courage and hard work will make you learn what is needed, it will give you the temple to perform at the highest possible level. There is no better acquired knowledge than the one that is hard to learn.

Never give up in trying to understand the universe and in working for a better world.

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