

What does it mean “Science Communication”?

Luca Perri

OAB – Astronomical Observatory of Milano Brera

Unilnsubria – University of Insubria

INAF – National Institute of Astrophysics

INFN - National Institute of Nuclear Physics

Who I am

I am a Ph.D. student in Physics and Astrophysics, but people say that I am a science communicator.

I started communicating science about 10 years ago, during Science Festivals around Italy.

Who I am

I am a Ph.D. student in Physics and Astrophysics, but people say that I am a science communicator.

I started communicating science about 10 years ago, during Science Festivals around Italy.

Nobody paid attention to me at all.

Who I am

In 2015 I was forced to participate in the FameLab competition.

I don't know how, but I won the Italian finals and I participated in the international ones.



Who I am

In 2015 I was forced to participate in the FameLab competition.

I don't know how, but I won the Italian finals and I participated in the international ones.

Again, nobody paid attention to me.



Who I am

After the discovery of the Gravitational Waves, everybody started to ask “Who cares??”.

So I was really angry and I wrote a post on Facebook, explaining why it was important.

An astrophysical post of more than 100 lines on Facebook...

Who I am

After the discovery of the Gravitational Waves, everybody started to ask “Who cares??”.

So I was really angry and I wrote a post on Facebook, explaining why it was important.

An astrophysical post of more than 100 lines on Facebook...

...30k likes and 23k sharings.

Who I am

After the discovery of the Gravitational Waves, everybody started to ask “Who cares??”.

So I was really angry and I wrote a post on Facebook, explaining why it was important.

An astrophysical post of more than 100 lines on Facebook...

...30k likes and 23k sharings.

This time, everybody paid attention to me.

So, who am I?

So, who am I?

An overweight lucky guy.



Why I started communicating

- Passion

When I was young I participated in a lot of Science Festivals as audience. So when I grew up, I tried to be an active part of the Festivals, becoming a guide.

Why I started communicating

- Passion

When I was young I participated in a lot of Science Festivals as audience. So when I grew up, I tried to be an active part of the Festivals, becoming a guide.

- Girls

My girlfriend-to-be (now my ex-girlfriend) pushed me to do it. (D'OH!)

Why I communicate now

- Passion

We are physicists, we are basically sociopaths.

During a conference or a science lab you can mistreat people (especially kids), and no one can say anything. Because you are supposed to be the teacher, so you can be rude.

And this is really satisfying.

Why I communicate now

- Self-defence

After “Do the U.F.O. really exist?”, the second question the people pose to me is

Why I communicate now

- Self-defence

After “Do the U.F.O. really exist?”, the second question the people pose to me is

“Why the Hell do we have to pay you a salary???”

Why I communicate now

- Duty

At least part of the money I spend in my research comes from the taxes of citizens (italians or europeans ones), so I think it's my duty to explain to the citizenry how I spend their money and why.

Is it a waste of time?

According to my boss, yes.

According to me, **not at all**.

In a country like Italy most of people think research is a waste of money.

But in a country like Italy most of people depend on their smartphones and other technologies.

Is it a waste of time?

If you explain to them that today we would not have the cell phones without the Apollo missions or we would not have the World Wide Web and the touchscreens without the research in particles physics, maybe they will stop complaining after every science discovery.

Science communication and teaching

My colleagues (especially theoretical physicists) usually ask me “why should I waste time explaining my work to people who cannot understand it?”

Science communication and teaching

My colleagues (especially theoretical physicists) usually ask me “why should I waste time explaining my work to people who cannot understand it?”

As I said, I think it's a duty.

Science communication and teaching

My colleagues (especially theoretical physicists) usually ask me “why should I waste time explaining my work to people who cannot understand it?”

As I said, I think it's a duty.

And as I said, we are basically sociopaths.

Science communication and teaching

But I think that this attitude is based on a misunderstanding:

Science communication and teaching

But I think that this attitude is based on a misunderstanding:

science communication is not teaching

You don't have to teach them how to do your job, you have to explain them why the research is important for the society.

Science communication and teaching

You have to seduce them.



The audience

What age group should you focus on?



Kids?

Not really: they are genuine scientists.

Have you ever found a kid who was not interested in science?



Kids?

Not really: they are genuine scientists.

Have you ever found a kid who was not interested in science?

And they are happy when you are rude. They are the perfect audience.

Kids?

Not really: they are genuine scientists.

Have you ever found a kid who was not interested in science?

And they are happy when you are rude. They are the perfect audience.

There is only a problem with the kids: less than 25% of the children can imagine women scientists.

And this percentage is made by girls.

High school students?

Here we have the real problem: when the childrens grow up they start to lose interest in science.



High school students?

Here we have the real problem: when the childrens grow up they start to lose interest in science.

Usually this is because in the classroom they see Science as something unrelated to their daily life, a senseless group of equations.

So...

High school students?

Here we have the real problem: when the childrens grow up they start to lose interest in science.

Usually this is because in the classroom they see Science as something unrelated to their daily life, a senseless group of equations.

So... you have to be sexier.



University students and adults?

Hell yeah, because they can:



University students and adults?

Hell yeah, because they can:

- **vote** – and push the rulers to finance the research



University students and adults?

Hell yeah, because they can:

- **vote** – and push the rulers to finance the research
- **be very rich** – and support your research (and maybe hire you)



University students and adults?

Hell yeah, because they can:

- **vote** – and push the rulers to finance the research
- **be very rich** – and support your research (and maybe hire you)

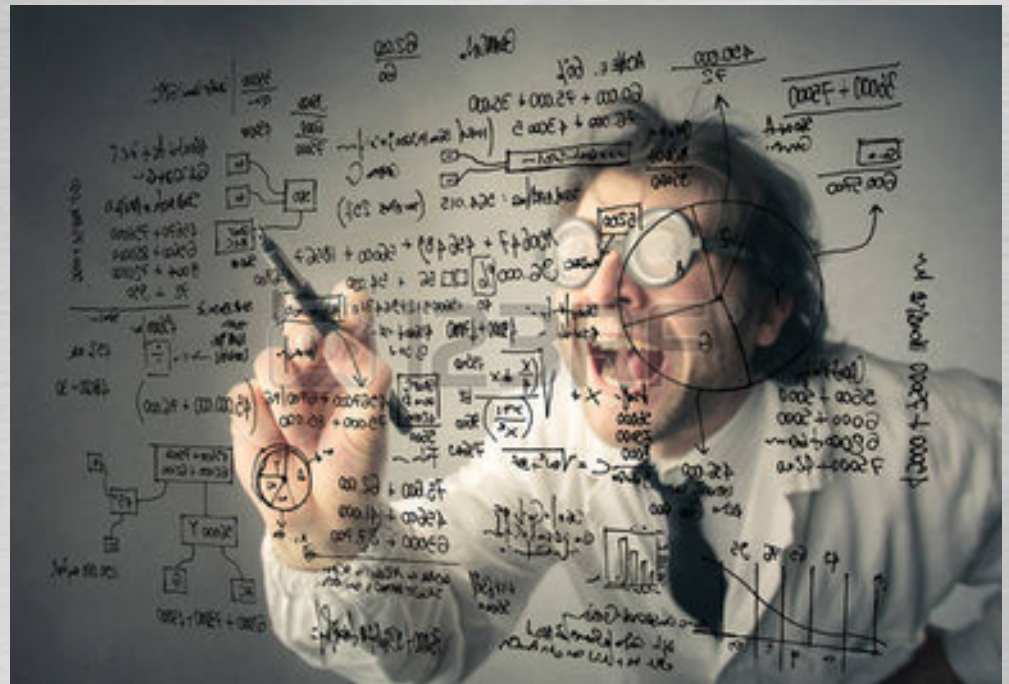


In Italy we usually don't understand this things.

Who has to communicate science

In theory, everybody.

Somebody is more gifted, somebody is less talented.

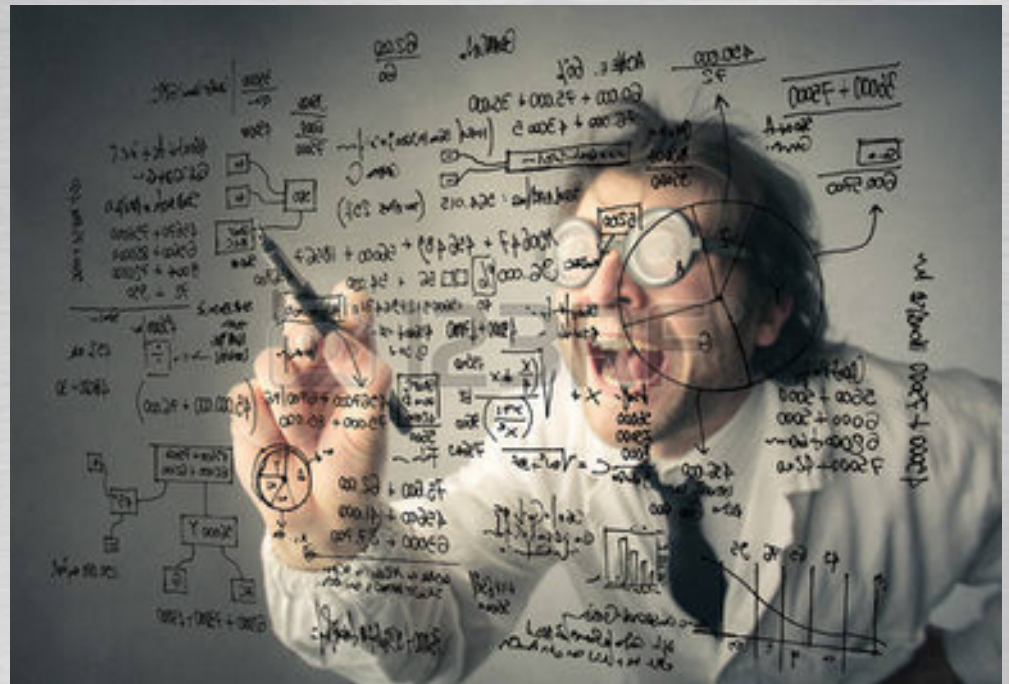


Who has to communicate science

In theory, everybody.

Somebody is more gifted, somebody is less talented.

There is no “right way” to do it, everyone has to find their own way.



Thank you