

SCIENCE WRITING WORKSHOPS WITH THE ATLAS EXPERIMENT

CLAIRE ADAM BOURDARIOS

ON BEHALF OF THE



TASNEEM ZEHRA HUSAIN



MOBIUS STRIP
WRITE SCIENCE.

THE OUTREACH DILEMMA



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THE OUTREACH DILEMMA

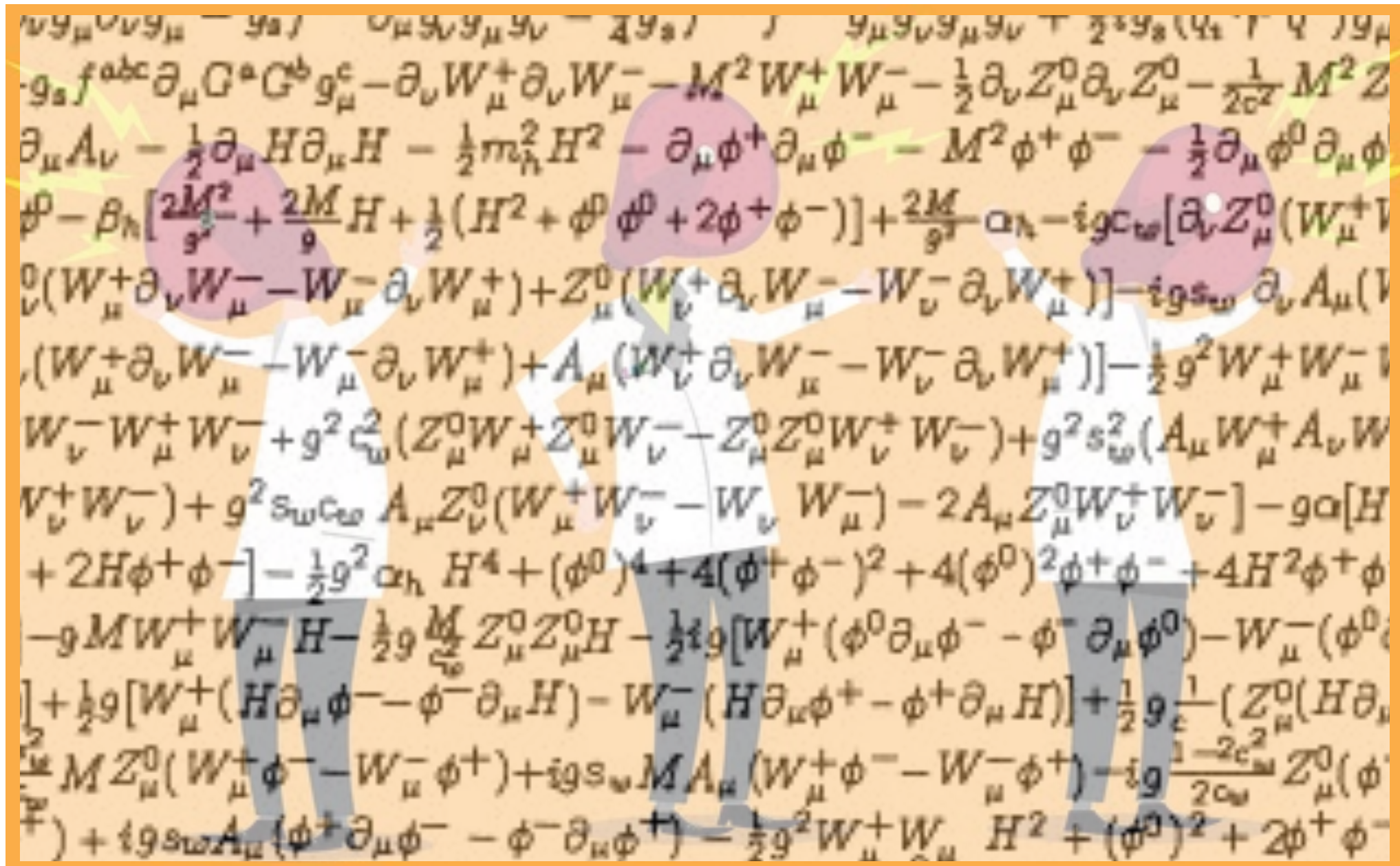
What we think we're saying



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THE OUTREACH DILEMMA

What we think we're saying isn't what they hear



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REMEMBER THE PHOTOELECTRIC EFFECT?

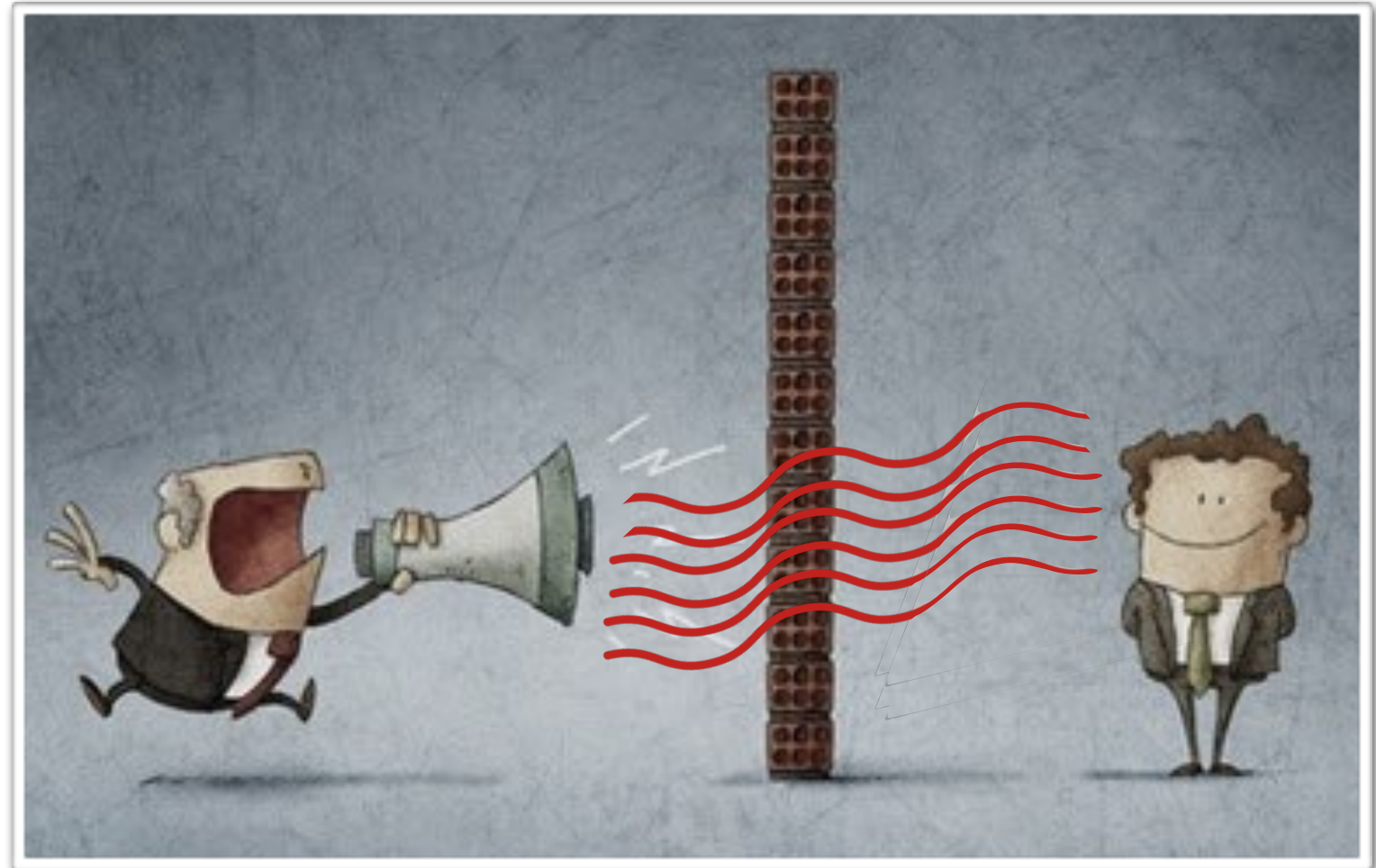
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REMEMBER THE PHOTOELECTRIC EFFECT?

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If something doesn't work
more of the same
won't get a response either.



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We must switch things up.
Change the frequency.



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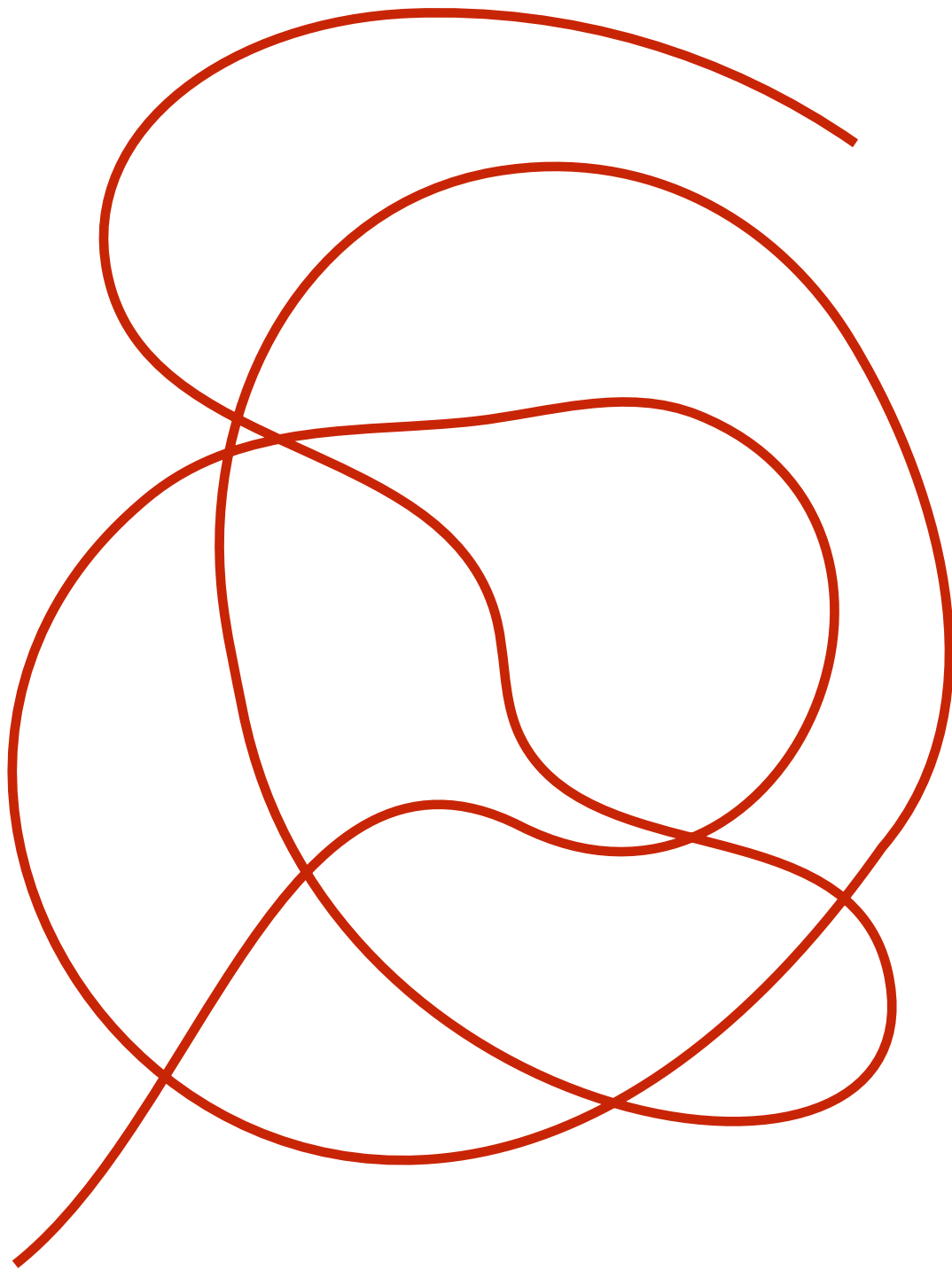
If we want to get through to people,
rather than focusing on the facts alone,
we should aim to communicate experiences.

MY WORLD LINE

I didn't get here cruising along
a geodesic.

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a geodesic.



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I wasn't entirely satisfied with traditional non-fiction starting out, and after years of doing outreach, teaching and writing, I figured out why.

MY WORLD LINE



I didn't get here cruising along a geodesic.

I wasn't entirely satisfied with traditional non-fiction starting out, and after years of doing outreach, teaching and writing, I figured out why.

Once I could state the problem, I started looking for solutions, and I was excited to share them.

MEANWHILE AT CERN ...

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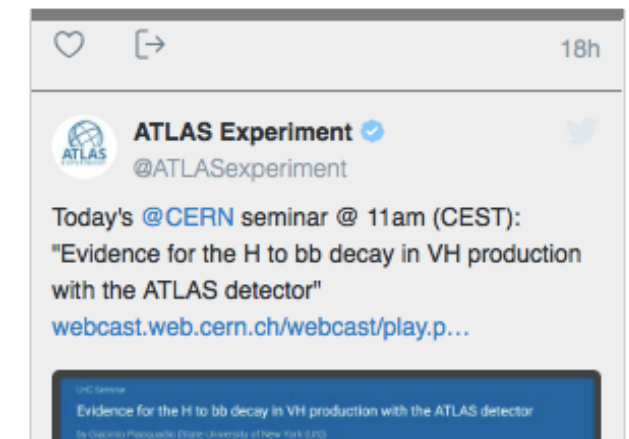
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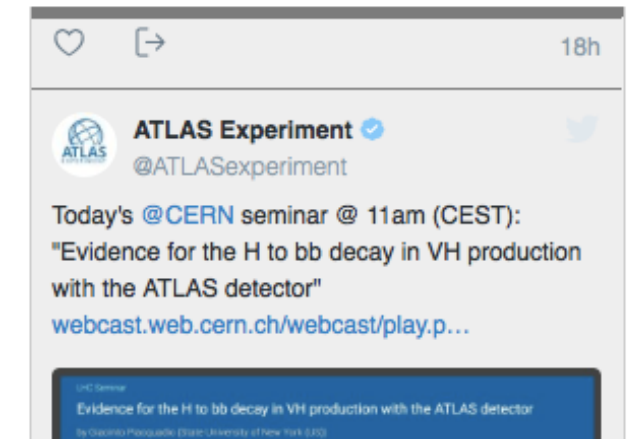
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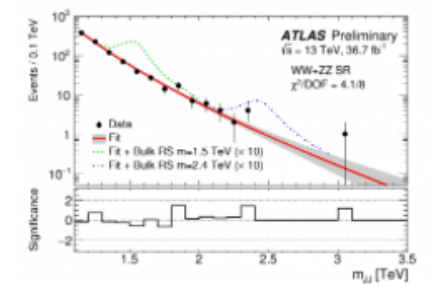
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Physics Briefing

Probing physics beyond the Standard Model with heavy vector bosons

Although the discovery of the Higgs boson by the ATLAS and CMS Collaborations in 2012 completed the Standard Model, many mysteries remain unexplained. For instance, why is the mass of the Higgs boson so much lighter than one would expect and why is gravity so weak?



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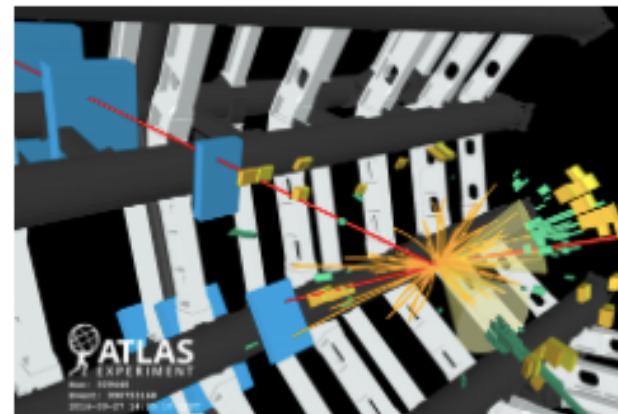
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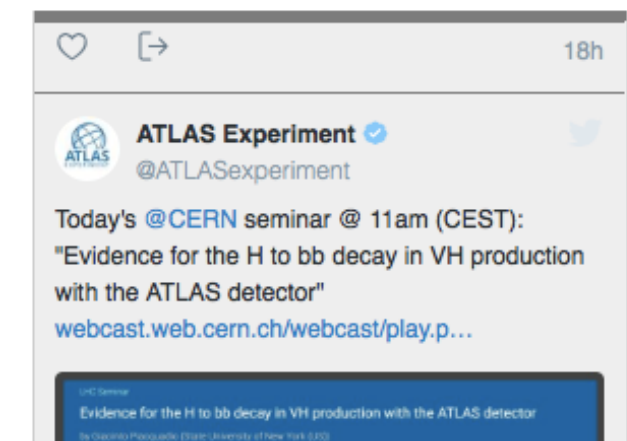
ATLAS News

ATLAS Highlights from EPS-HEP 2017

The ATLAS Collaboration has presented important new results at the European Physical Society conference on High Energy Physics (EPS-HEP) in Venice (Italy), including the latest analyses of 13 TeV Run 2 data from the Large Hadron Collider (LHC).



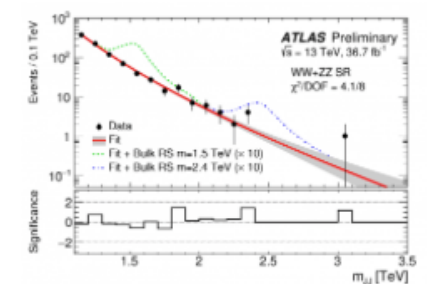
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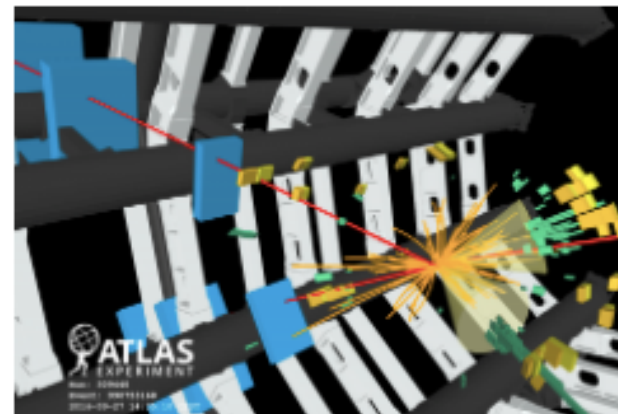
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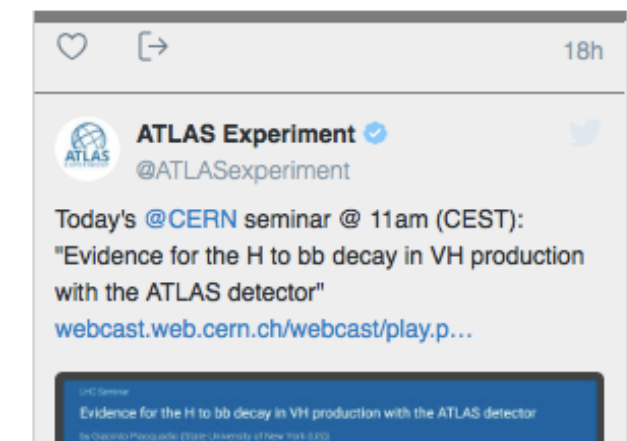
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ATLAS Blog

Something Old, Something New: Perspective of LHCP2017

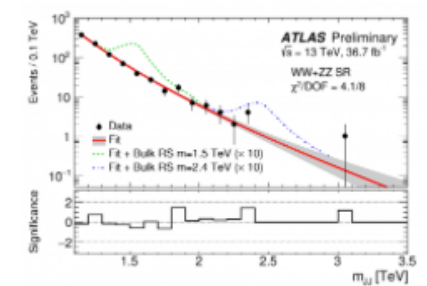
7th June 2017 – More than 400 physicists from around the world visiting Shanghai to hear the latest LHC results, at the fifth annual Large Hadron Collider Physics (LHCP17) conference. It was a wonderful opportunity for Chinese particle physicists and students, who do not often have the chance to travel abroad! Even for me, although I have been working on the LHC for almost 10 years, this was still my first time attending such a high-level conference to hear the first-rate physics results from all four experiments at the Large Hadron Collider.



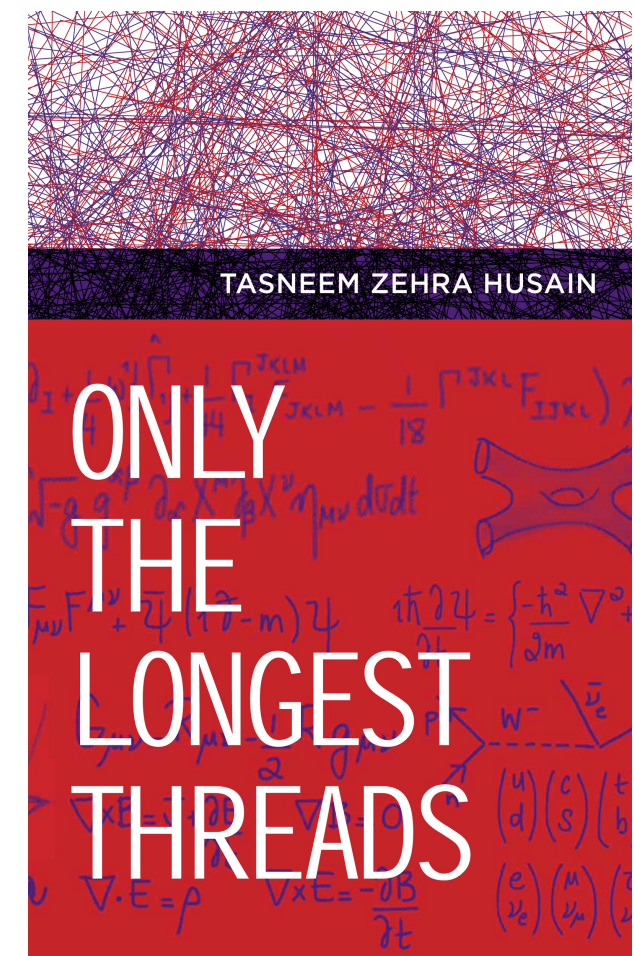
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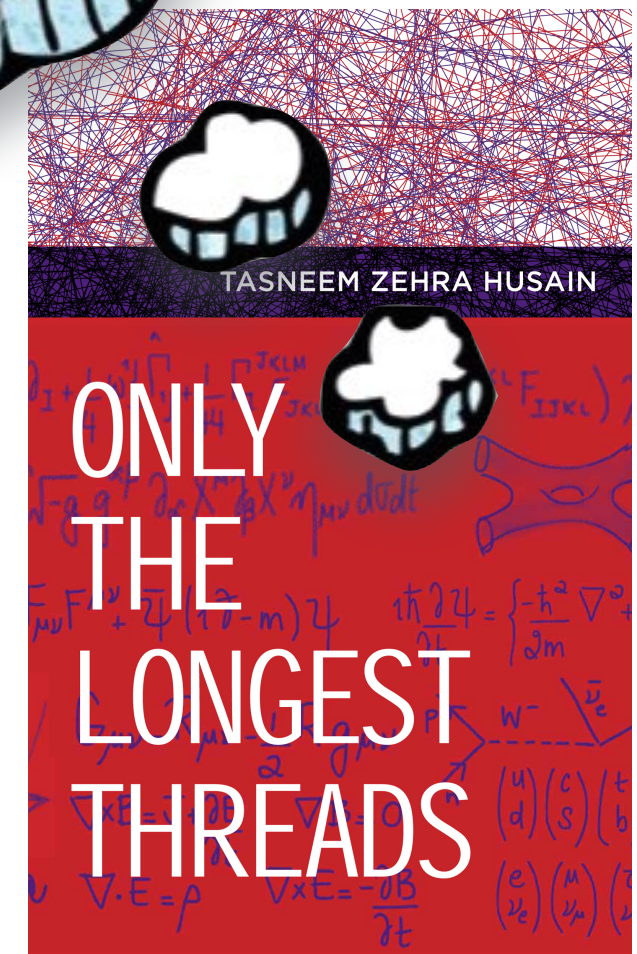
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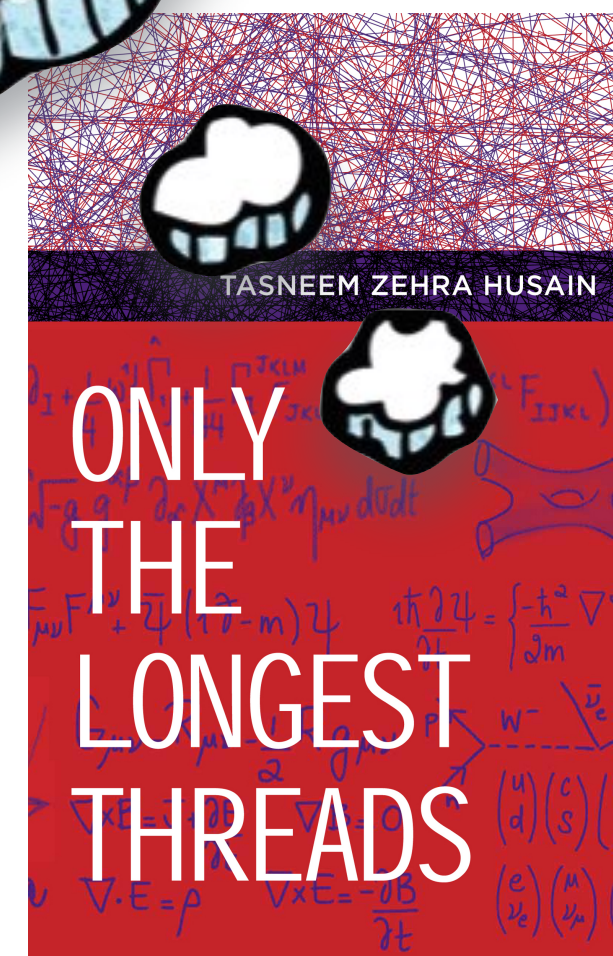
... AND WE COLLIDED



... AND WE COLLIDED



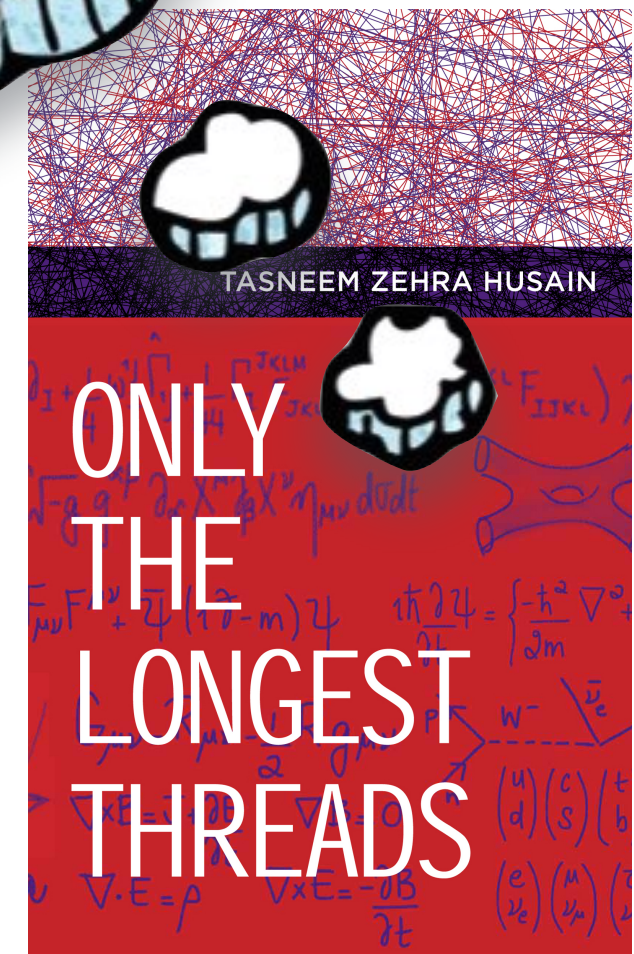
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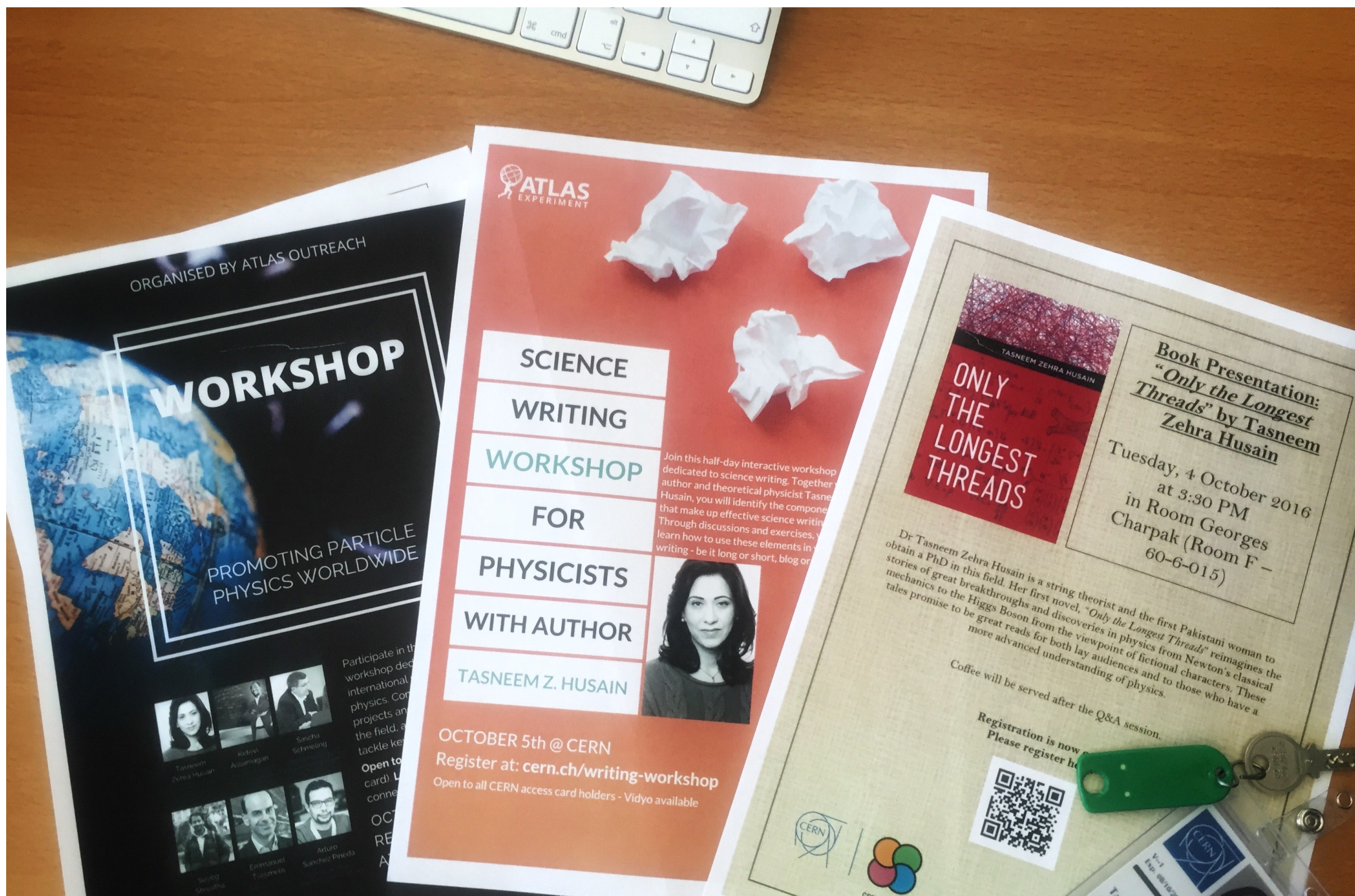
... AND WE COLLIDED



The ATLAS Outreach & Education group was looking to enrich **existing efforts** by establishing **partnerships** with **external experts**, who would bring a **new perspective**.



... AND WE COLLIDED



WRITING WORKSHOPS - MAY 2017

THE BUILDING BLOCKS OF SCIENCE WRITING

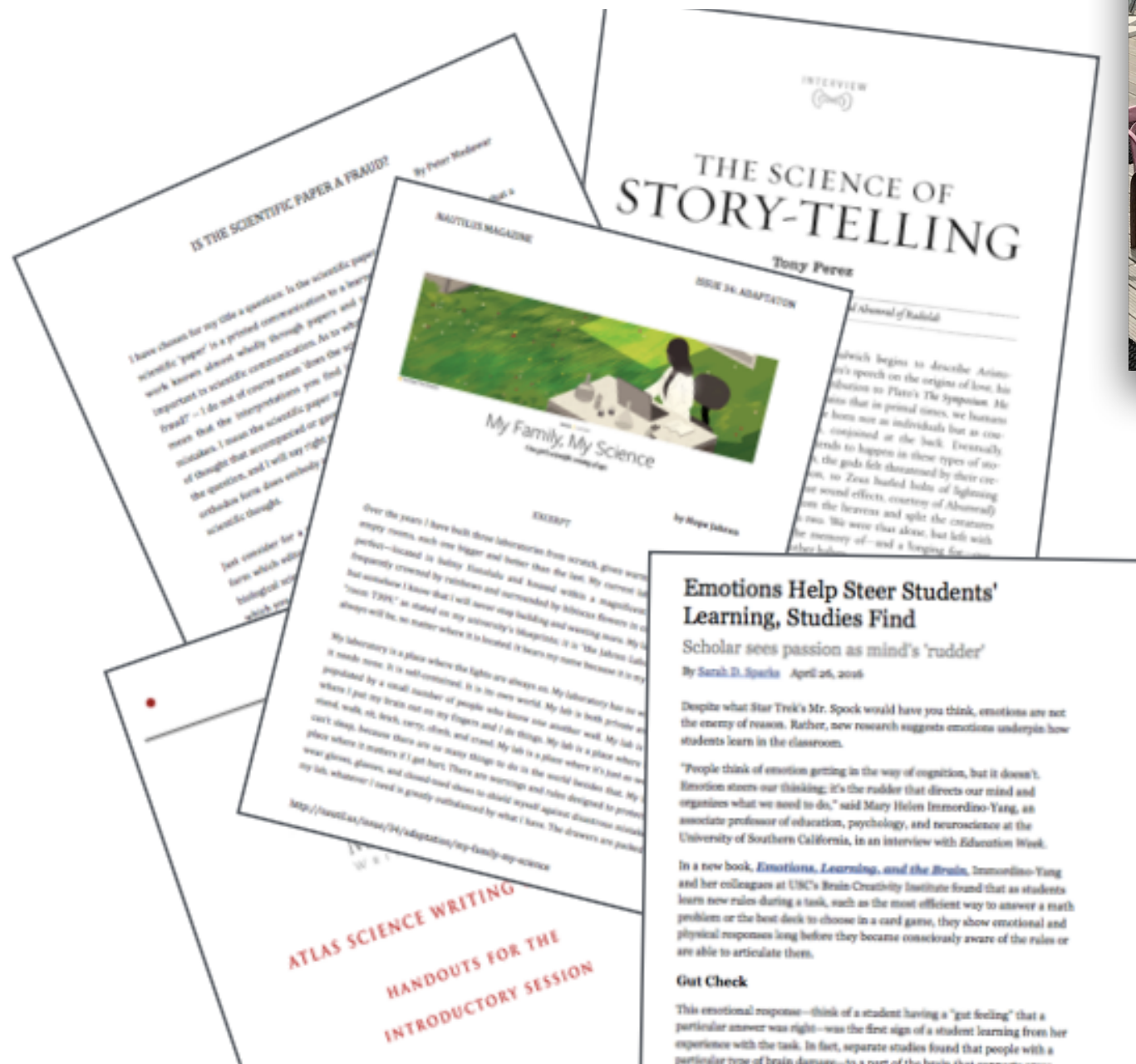
Introductory Session (2 days)



WRITING WORKSHOPS - MAY 2017

THE BUILDING BLOCKS OF SCIENCE WRITING

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Consider a range of sources

WRITING WORKSHOPS - MAY 2017

THE BUILDING BLOCKS OF SCIENCE WRITING

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Consider a range of sources

Identity the basic elements

Explore their form & function

WRITING WORKSHOPS - MAY 2017

THE BUILDING BLOCKS OF SCIENCE WRITING

Introductory Session (2 days)



Consider a range of sources

Identity the basic elements

Explore their form & function

Construct a working model

THE BUILDING BLOCKS OF SCIENCE WRITING

Advanced session (3 days)



THE BUILDING BLOCKS OF SCIENCE WRITING

Advanced session (3 days)

Reverse engineering:

What does the reader want?



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Reverse engineering:

What does the reader want?



Work on finding participants' unique voice/perspective.

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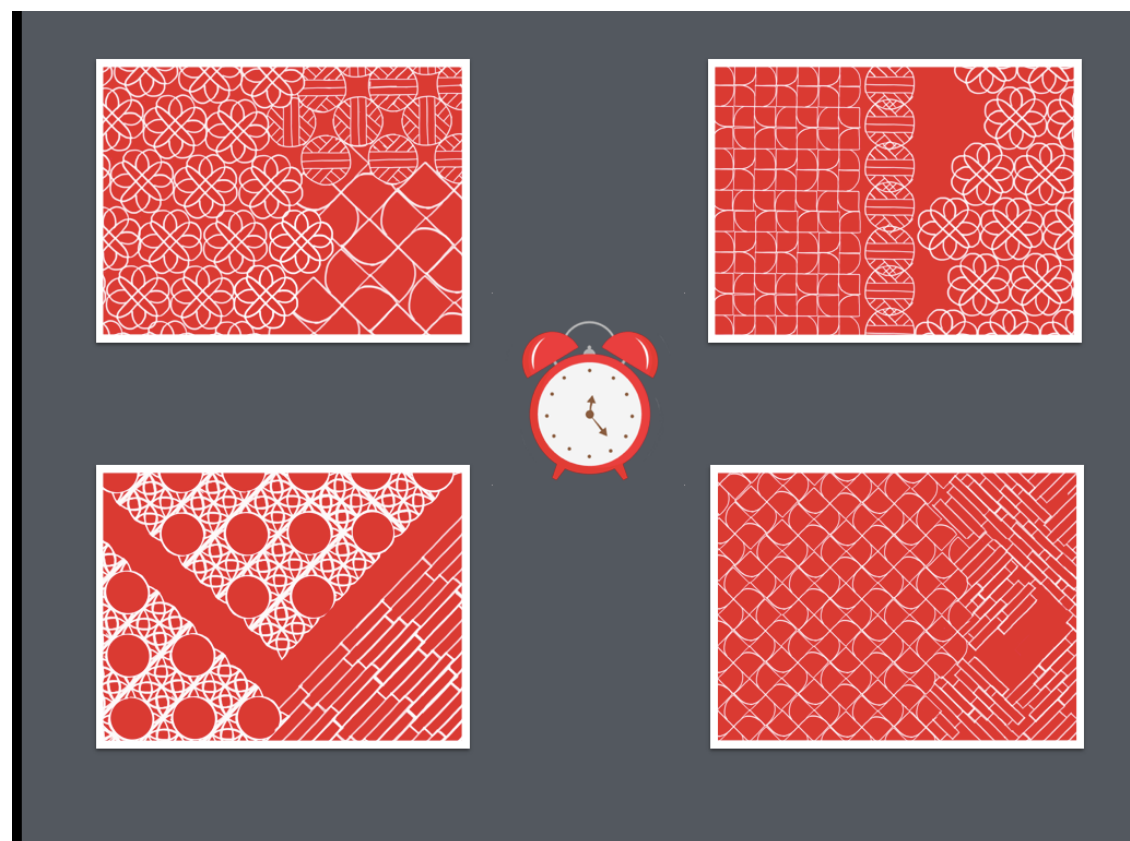
More writing exercises.

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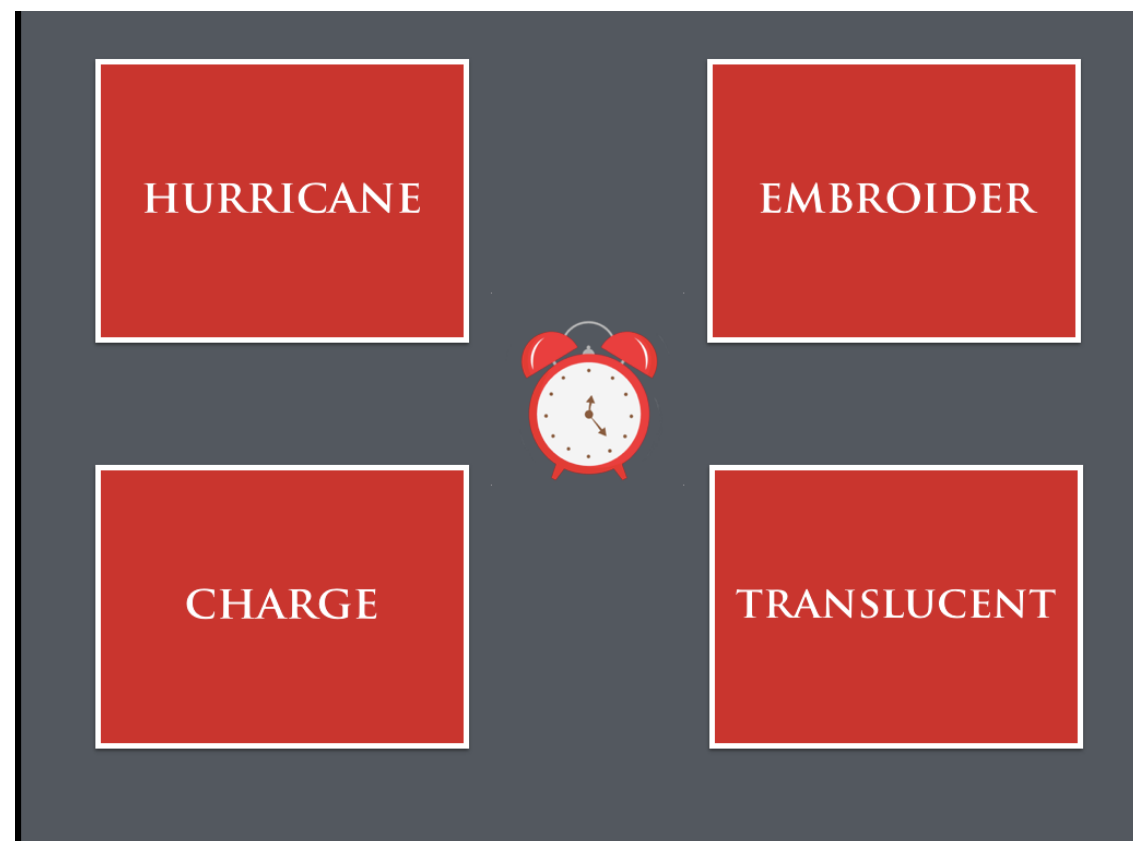
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More writing exercises.

FEEDBACK

and many of the tips very
stuff about human connection,
not sure how well I will be able to
This was on interesting
we a lot to think about. Maybe
most important point
emphasis on the pers
There is a
science.
my students
ing talk that captured my attention
own language which
new players. This, even
I liked the fact that the wr.
sed on what they reader/audience
waiting to

Overall I thought it
was excellent and very
engaging. The small c-
generated lots of
The writing was very good
were very good
could maybe
I particularly appreciated the distinction on the "details"
the storytelling (that I'll dig out more)
concentrate too much on the science
to provide details on the science
Surround the scientific process

I wish it had been longer,
the ideas in some writing are
of course, experience
pool delivers surp
here open and built friends
I hope you so much
I was the

I live what you do. Thank you
for the wonderful workshop!
I think you have a very subtle
approach when it comes to expla
like to talk to

liked a lot the workshop
two books in
where in
which I
and -

noticed things
helped really
interesting presentation. You

FEEDBACK

“Having science writing presented to physicists by a physicist is great because there is a common language.

Often, skills are wrapped in their own language which excludes new players. This has not been the case.”

WHAT NEXT?

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At the very least, this experiment provided proof of concept.

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We're intrigued by what what we've seen in the preliminary run and are eager to gather more data.

The next phase is under design. We aim for each step to build on the last, so skills and information are reinforced, rather than repeated.

STAY TUNED!

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<http://atlas.cern>

<http://mobiustrip.com>