

ASFAP Community Town Hall 12 – 15 July 2021

## COMMUNITY ENGAGEMENT GROUP

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# What is community engagement?

*“The process of **working collaboratively with and through groups of people** affiliated by geographic proximity, special interest, or similar situations **to address issues affecting the well-being of those people**”.*

*“It is **a powerful vehicle for bringing about environmental and behavioral changes** that will improve “the understanding and practise of physics” by the physics community and its members + the public at large”.*

*“It often **involves partnerships and coalitions that help mobilize resources and influence systems, change relationships among partners, and serve as catalysts for changing policies, programs, and practices**”.*

*([Principles of Community Engagement: First Edition](#). Centers for Disease Control and Prevention: CDC/ATSDR Committee on Community Engagement, 1997)*

# Why does community engagement matter?

- ✓ Increase the likelihood that projects or solutions will be widely accepted
- ✓ Create more effective solutions
- ✓ Improve people's knowledge and skills in problem solving
- ✓ Empower and integrate people from different backgrounds
- ✓ Create local networks of community members
- ✓ Create several opportunities for discussing problems before they get out of control
- ✓ Increase trust in community organizations and governance and may reduce future conflict

(Bassler, A. et al. 2008. [Developing Effective Citizen Engagement: A How-to Guide for Community Leaders](#).  
*Center for Rural America.*)

# The Physics community : Getting its act together

Physics is facing two fundamental challenges:

- 1- A PR (Public Relation) Challenge: the terrible image of Physics
- 2--A Cognitif & Didactic Challenge: incapacity of its practioners to present it simply and attactively

Physics in a nutshell:

*What is the most important science at all?*

*It is the science which deals with  
all things at all scales !*

الكوسمولوجيا  
على نطاق واسع

علم الفلك المجري

حائط بلنك

$10^{-33}m$

الكوسمولوجيا  
الكوانتية

المادة المظلمة DM؟  
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الفيزياء  
الجسيمية

كواركات  
غلوونات  
نيوتريونات

الفيزياء  
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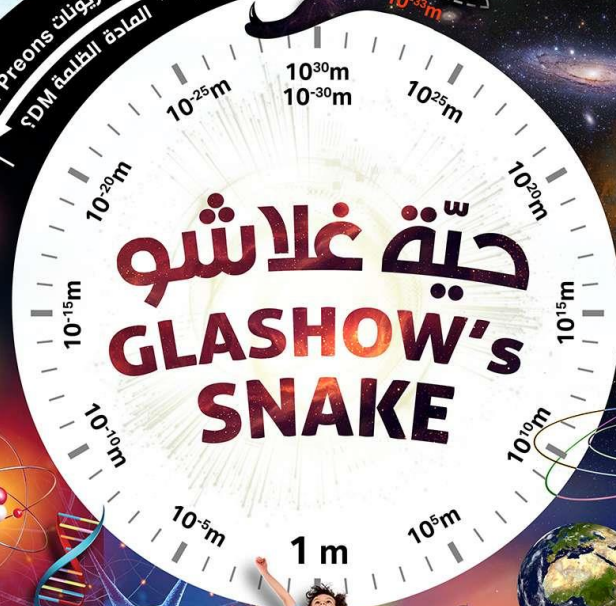
الكيمياء

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علوم الأرض

علم الفلك

علم الفلك  
شمسي



THE COSMIC UROBOROS  
الحية التي تعض ذيلها



جمعية اشغري لعلم الفلك  
Sirius Astronomy Association  
Design: C. Mouatzi  
www.siriusalgeria.net

# Physics

## ... In a Nutshell

**Physics:** *fundamental science used by a multitude of disciplines. So basic that we are not enough conscious of its fundamental character!*

- **The Material Sciences (Of course)**
- **The Earth Sciences.**
- **The Biological Sciences**
- **The Sciences of the Univers**
- **Engineering : Art of Optimising using physics! It is constrained physics ... Utilitarian and in fact opportunistic**

*Physics is for the other sciences  
what the air we breathe is for life.*

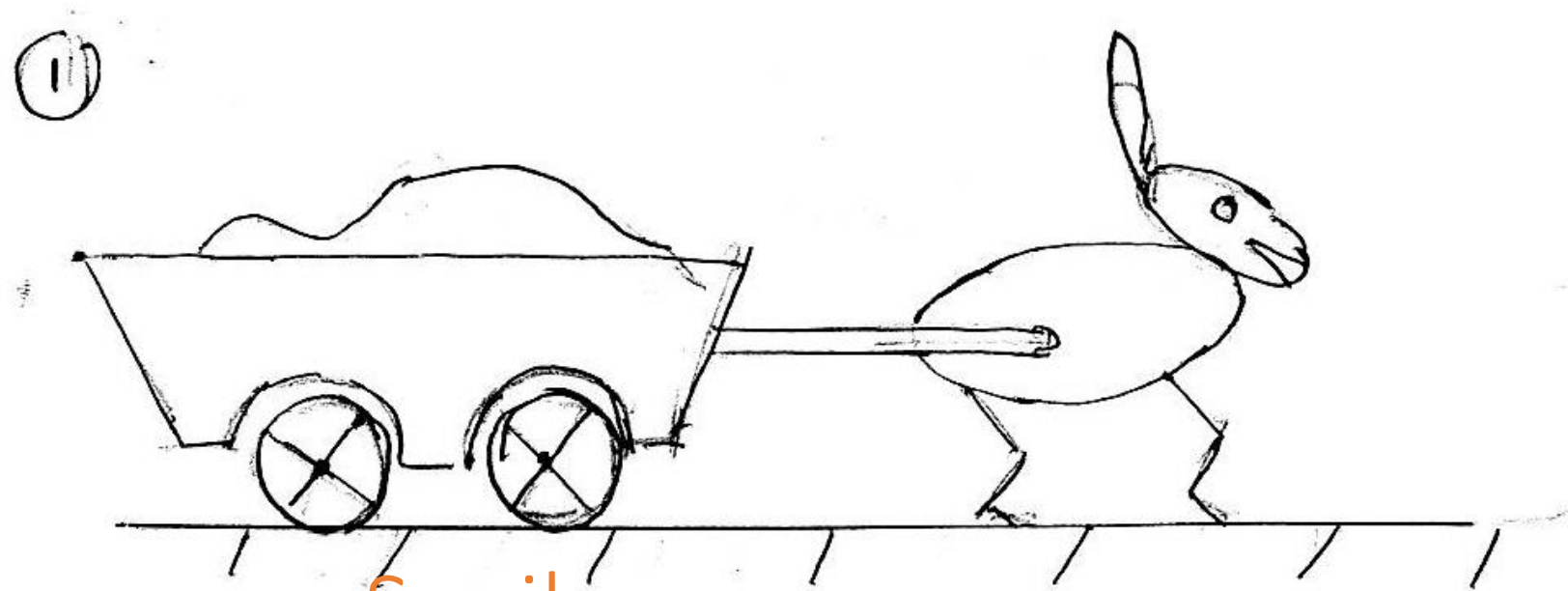
# Physics :

## The Didactic Challenge

1. *What is the most important science at all?*
2. *Why is the Donkey Wrong in his argument?*
3. *Which fundamental force is in action in order to push an object, any object?*
4. *Why is there only two electrons in the first layer of atoms?*
5. *Why is the Sun shining?*
6. *Explain all magnetic phenomena in one sentence ... and all e.m. wave production too in one extra sentence.*
7. *What is the most important equation in physics (In principle)?*
8. *Why does a spinning top not fall ?*
9. *Why people don't understand physics?*

# The Stubborn Donkey

...and Newton's third law: « Why pulling? »

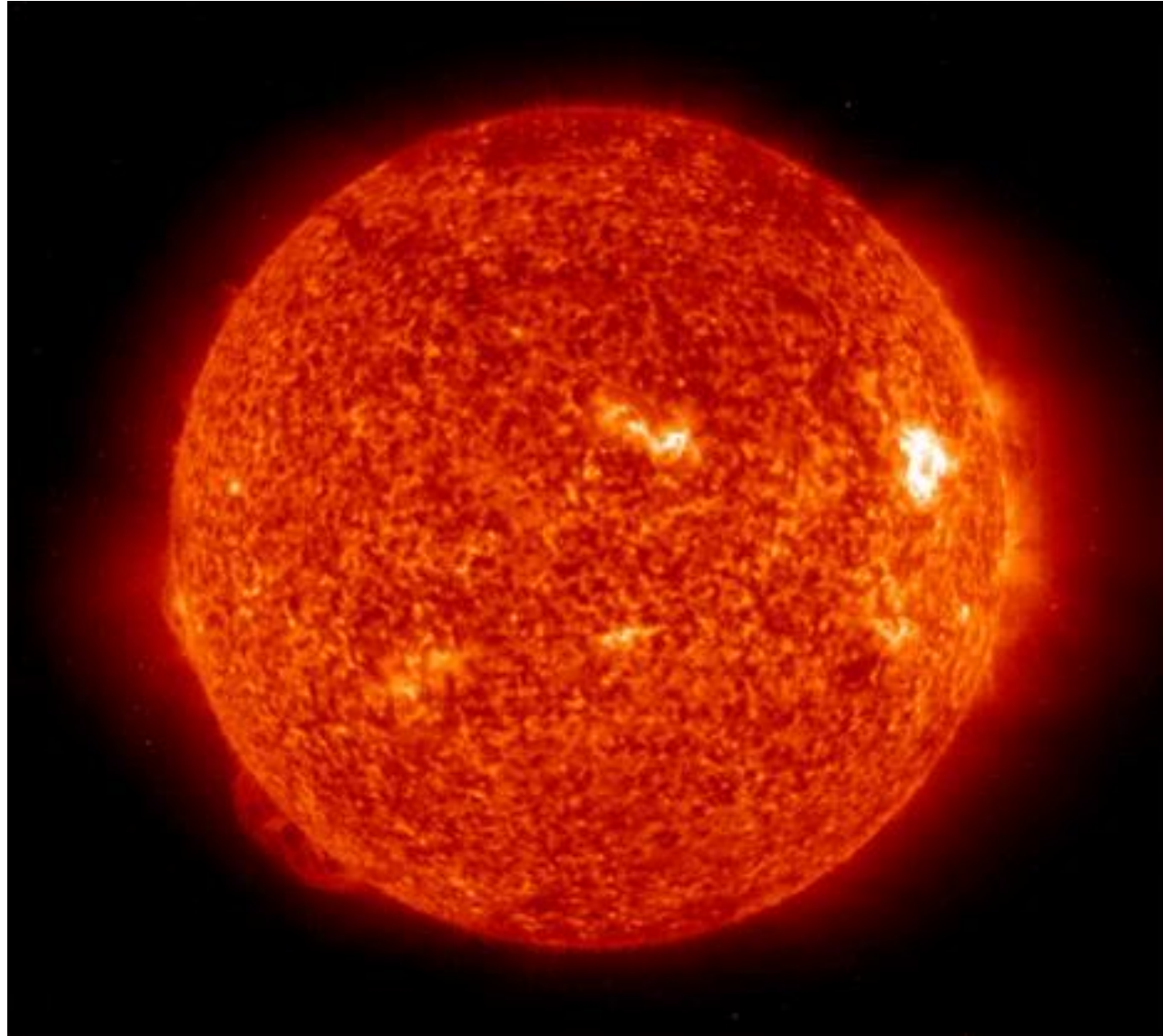


Spoiler:

*Earth is pushing back the cart and the donkey!*

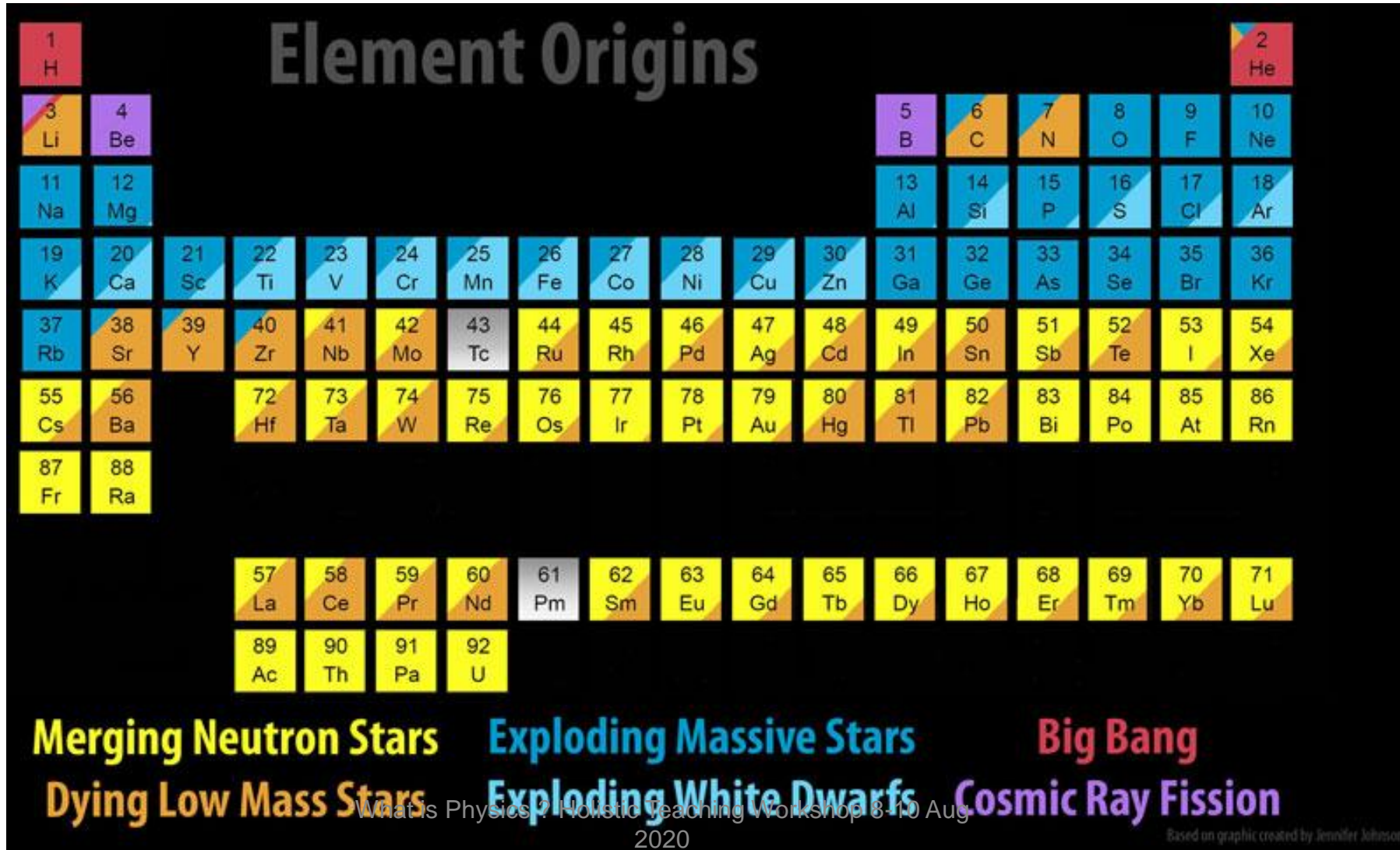


# *Why is the Sun shining?*



# One of the biggest success story of physics:

- Explaining Mendeliev's periodic table
- Finding each element's origin



*When the Higgs discovery  
was announced at CERN*



Indeed:

$\Phi$  is  $\Phi$ un

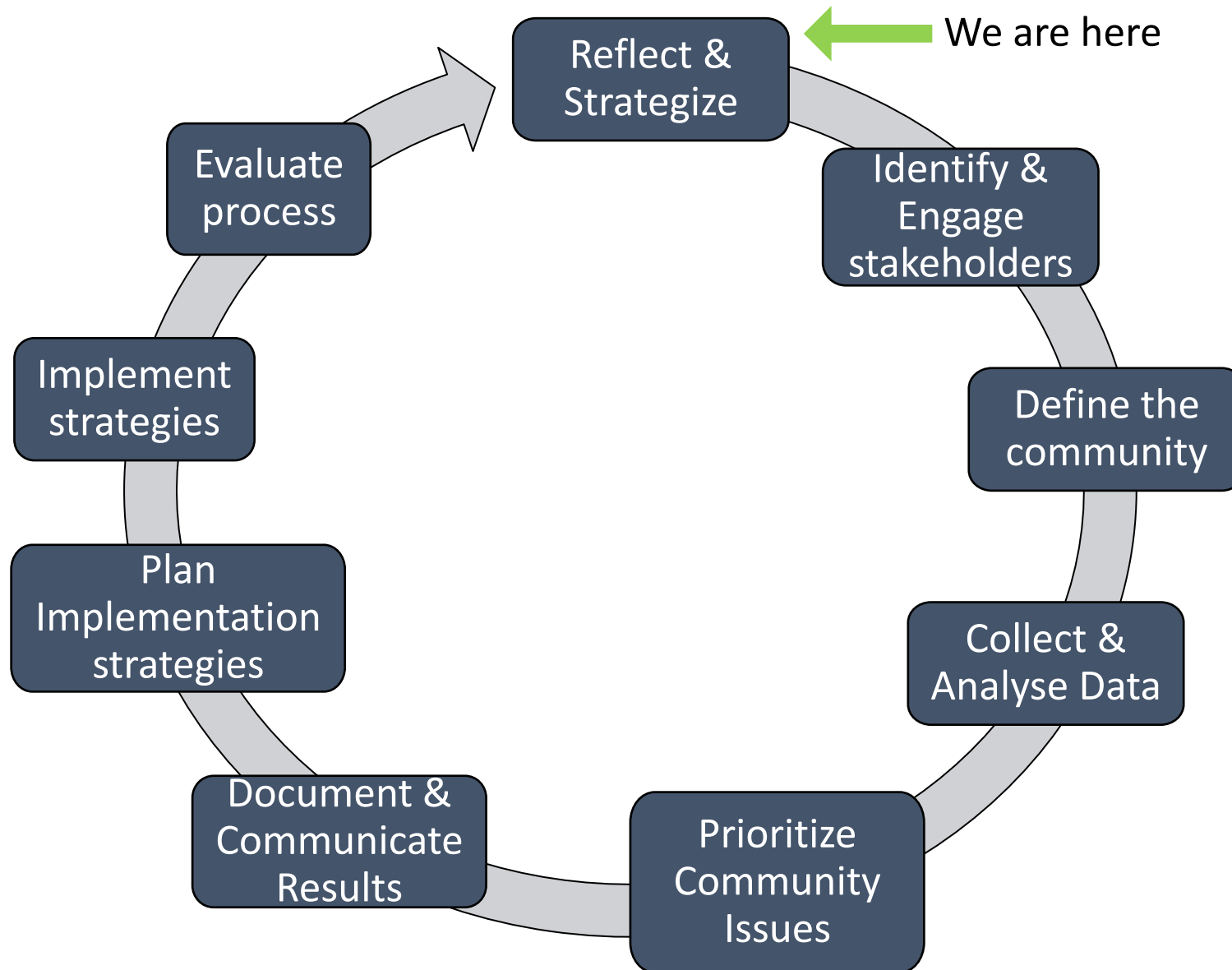
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# Principles of successful community engagement

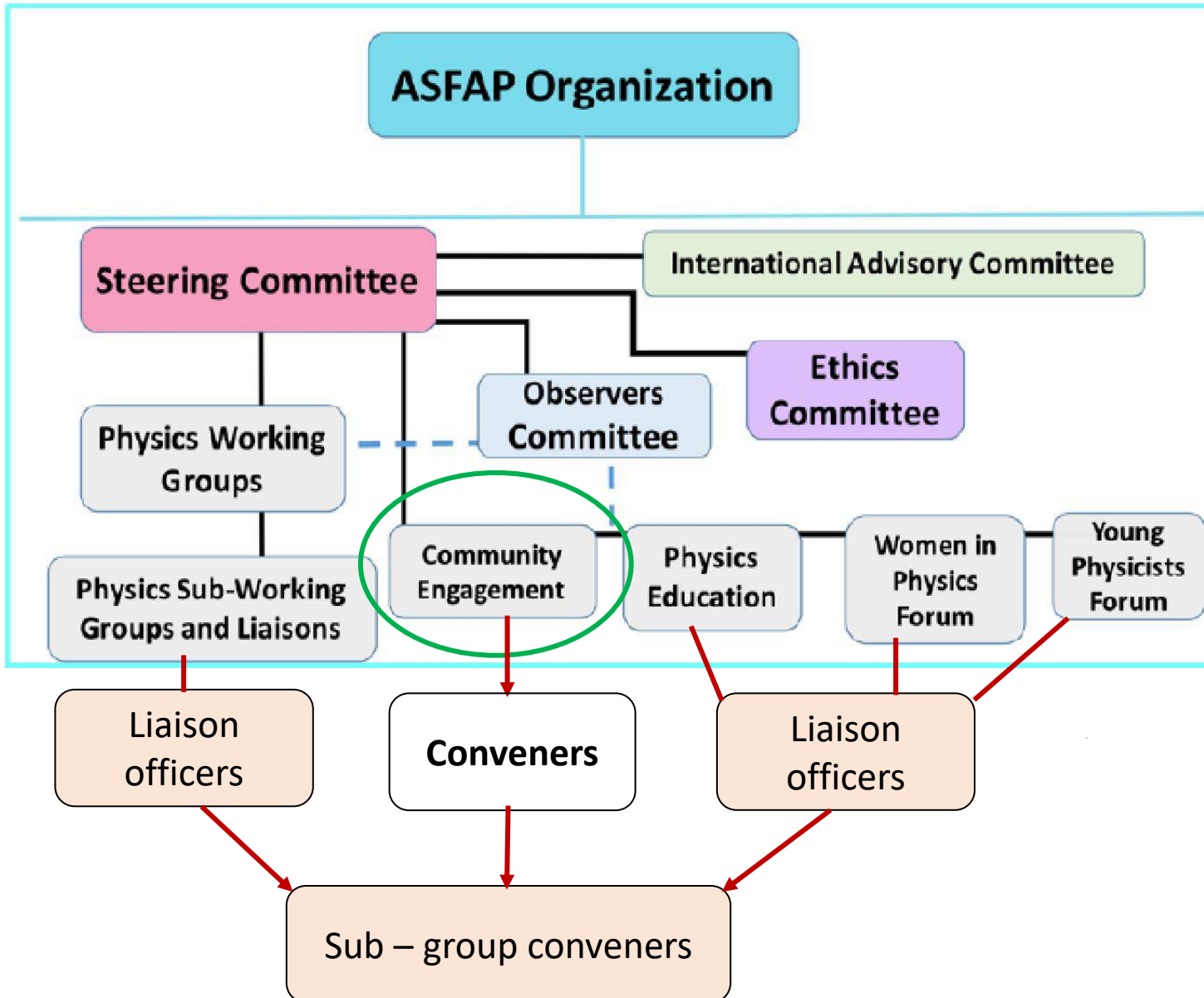
1. Careful planning and Preparation (adequate and inclusive)
2. [Inclusion and Demographic Diversity](#) (people, voices, ideas, and information)
3. Collaboration and Shared Purpose (work together to advance the common good)
4. [Openness and Learning](#) (listen to each other, explore new ideas)
5. Transparency and Trust (clear and open process)
6. [Impact and Action](#) (ensure that each effort has potential to make a difference)
7. Sustained Engagement and Participatory Culture (programs and institutions that support continuous quality engagement)

(Matthews, David. 2008. [Connections 2008: Focus on Communities](#). *Kettering Foundation*.)

# Steps of the community engagement process



# ASFAP Community Engagement Group



## ■ Vision:

- Help reform and transform higher education and scientific research systems in Africa to energize and unlock the minds for brighter economic prospects. Do this especially for physics as a locomotive for science and being the archetypical science.
- Help Africa take its due place as a co-leader in the global scientific process

✓ **Community engagement should be an integral part of each WG**

- Establish a collaboration with other WGs
- Invite people to the different sub-groups

# C.E Group Conveners

- Currently the C.E Group has 3 conveners



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(South Africa)



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Cheikh Anta Diop University

Director General of the Senegalese Authority for  
Radiation Protection and Nuclear Safety

(Senegal)



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Univ. of Constantine -1,  
Constantine, (Algeria)

President, African  
Astronomical Society (AfAS)



# Milestones & Plans

## ■ 12 topics divided in 7 provisional sub-groups:

- **Sub-group 1:** Physics communication and outreach
- **Sub-group 2:** a. Technology transfer; b. Internet connectivity/ internet start up resources; c. Applications and industry
- **Sub-group 3:** E-lab & e-learning
- **Sub-group 4:** Business development and entrepreneurship
- **Sub-group 5:** a. Public education and outreach; b. Diversity and inclusion and equity
- **Sub-group 6:** Government engagement and public policy
- **Sub-group 7:** a. Career pipelines & development; b. Retention; c. Capacity development

## ■ Milestones: Meetings & Discussions

- ✓ 13 April 2021: 1<sup>st</sup> ASFAP Meeting with the Community Engagement Group
- ✓ 12 May 2021: 1<sup>st</sup> Meeting of C.E Group conveners
- ✓ 23 June 2021: 2<sup>nd</sup> Meeting of C.E Group conveners (+ some observers & Steering committee)

## ■ Plans:

- July – August 2021: **Grow the group & Start collaboration with other WGs**
  - Contact other WGs
  - Invite people to the sub-groups
  - Collect ideas on topics
  - Finalise the topics and sub-groups
  - Liaison officers
- Follow the ASFAP Timeline Guideline

# Summary

- The C.E Group is still at the planning & preparation stage
- We need input from all the WGs:
  - ✓ Which topics do you feel the C.E group should focus on regarding your WG areas?
  - ✓ How do you suggest your WG is going to collaborate with the C.E group?
  - ✓ WGs should appoint a liaison officer to engage with the C.E group
- Link to subscribe to any ASFAP WG:  
<https://twiki.cern.ch/twiki/bin/view/AfricanStrategy/AfWorkingGroupRegistration>

**Thank you**