

Informal Learning and Public Understanding of Physics

Interactive, living and vital science

P. Cerreta, C.L. Toggia

Rete di Scuole - IIS "A.M. Maffucci" di Calitri - Associazione
ScienzaViva

We are living
a *historical change*
a **revolution** (a la Koyré)
in the conception of Physics

**From the closed world to the
infinite universe**

**From the closed understanding to
the public sharing of Physics**

From the slogan
«This is Physics: take it or leave it»

To the slogan
«Putting Physics in the
hands of people»

Science Center point of view

ECSITE: Bridging the gap between
Formal and Informal Science Learning

Schools and Universities point of view

PENCIL (Permanent European
Resource Centre for Informal Learning)

The question is to find out if the Informal Learning (i.e the general communication) includes the communication to the students

or this is a specific and different problem

Scientists
and Experts

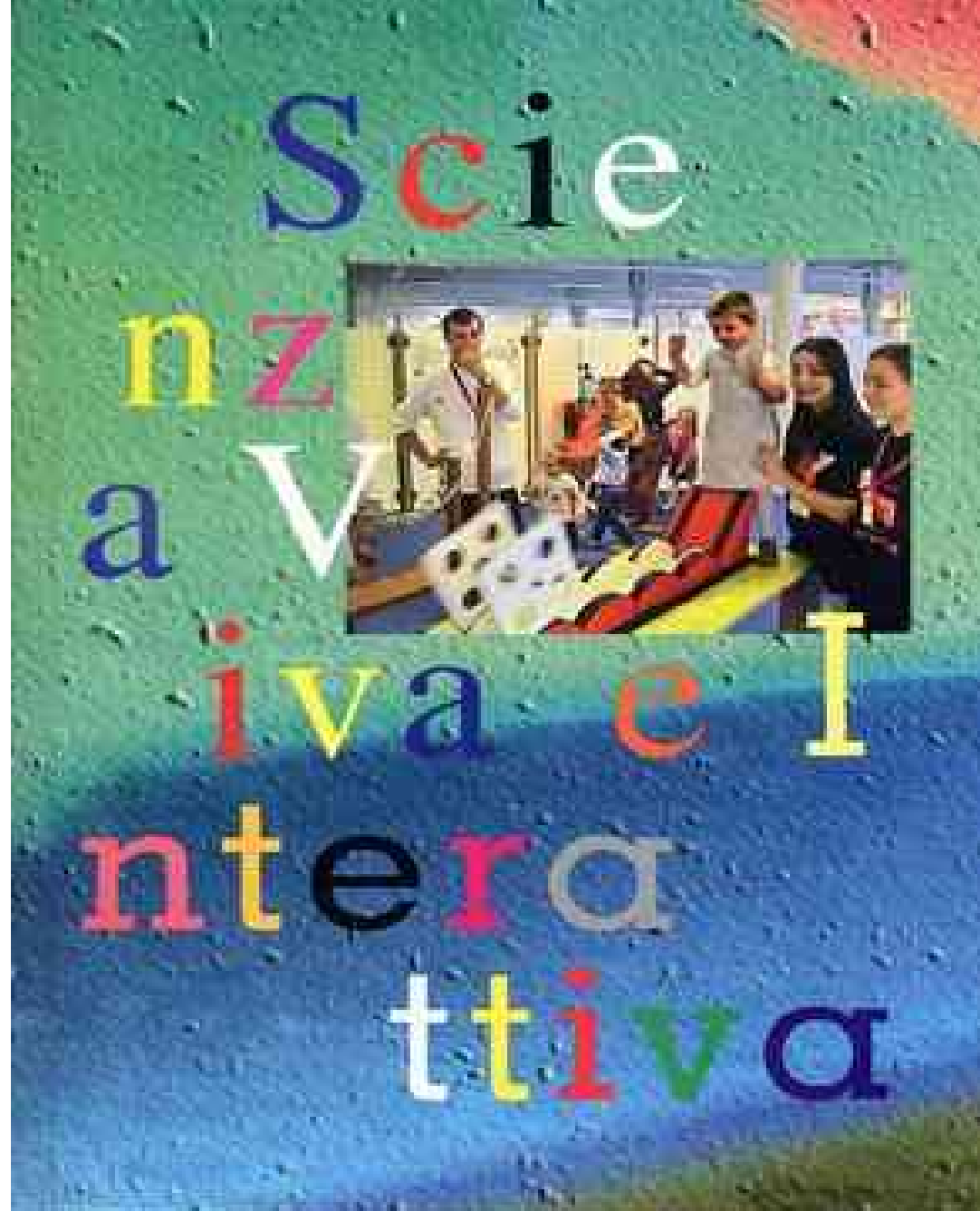
Common People

Students



Association
of teachers,
students
and artisans
Calitri, Italy

Aging on the entire
national field



ScienzaViva is an alliance
between
teachers,
artisans
(and students)

ScienzaViva performs explanatory
connecting actions between scientists,
students and common people

produce by itself scientific
interactive exhibits which are
used both in the Schools and
in Public Exhibitions

introduces into the Schools styles of learning which are coming from Science Centres

identifies theoretical dimensions of the hands-on activities that are employed in teaching physics

organises travelling scientific demonstrations, around the Italian regions

involving «empirical knowledge» in addition to scientific **rules and laws**

Artisans as living treasures

ScienzaViva prefers being socially and intellectually independent from the Universities and the Big Science

More interested in the practice of common people and his difficulties of understanding Science

ScienzaViva is a Grassroots movement

- **awareness** (the alliance between teacher and artisans gives effective ways to produce phenomenons)
- **“practice of freedom”** awakening critical awareness or *conscientizacao*.
- **enthusiasm** (everybody is able to understand nature and its phenomenons)

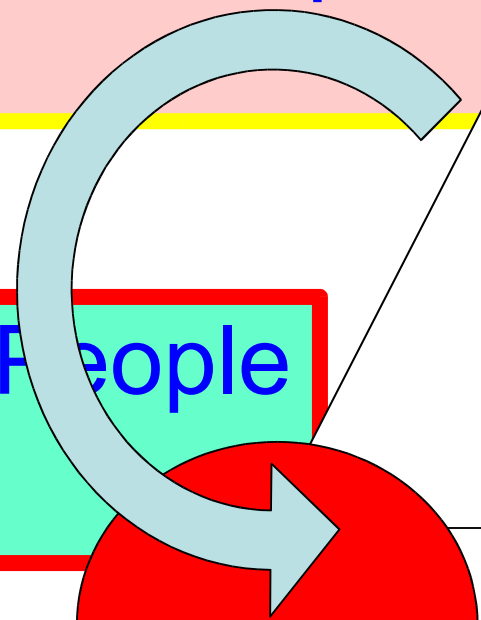
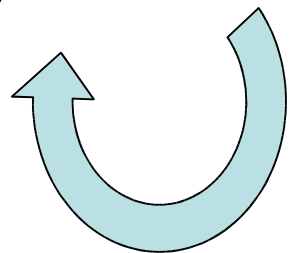
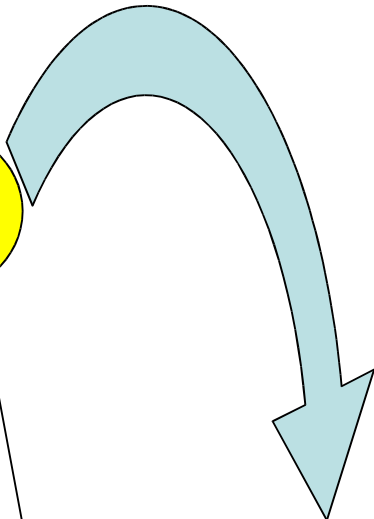
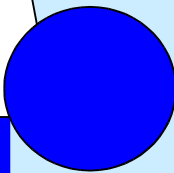
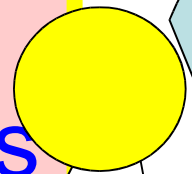
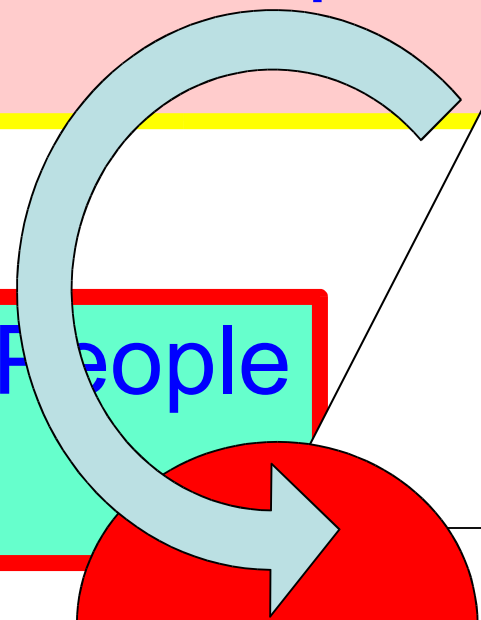
Common People

Scientists and Experts

Students

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Students



**Interactive, living and vital
science**

Essential fracture between
mathematical tradition and **empirical**
tradition of science

Essential fracture between **formal** and
informal science

Are they irreducible fractures? Are they linked to the cognitive modalities of the human mind?

Does the alliance between Teachers and Artisans solder the essential fractures ?